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*LIPPINCOTT'S
EDUCATIONAL SERIES*

*EDITED BY
MARTIN G. BRUMBAUGH, A.M., PH.D.*

THE
EDUCATIONAL
PROCESS



ARTHUR CARY FLESHMAN, A.M.



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SUPERINTENDENT OF SCHOOLS, PHILADELPHIA



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LIPPINCOTT'S EDUCATIONAL SERIES

THE EDUCATIONAL PROCESS

BY

ARTHUR CARY FLESHMAN, A.M.

PEDAGOGY AND TRAINING, STATE NORMAL SCHOOL, SLIPPERY ROCK, PA.

"The Truth shall make you Free"



PHILADELPHIA AND LONDON
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1908

TO VIII
ANNUAL

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OF
MY FATHER AND MY MOTHER

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AUTHOR'S PREFACE

"It is not the search after nor discovery of new ideas that makes an original man, so much as his ability to reclothe the old with some newness of appearance or meaning out of his own individuality."

This book attempts to organize a new doctrine of education out of an old theory of thought. The peculiar method of treatment is original but the fundamental principle creating and organizing the educational process is the central truth of all philosophy. The trichotomy running through this text is largely a necessary form of thought but it is at the same time a convenient mode of discussion. Each threefold division is organically related to every other in such a manner as to form a systematic whole. The sub-topics throughout the volume are suggestive rather than exhaustive.

In this pedagogy the problems of education are taken out of the domain of the mechanical, experimental, physiological, physical and psycho-physical and explained as a spiritual process. Education is a spiritual activity rather than a brain activity. The school is "an organic spiritual unity" and not a material, objective, fixed thing. Teaching is not a mechanical process but a spiritual activity beneath the form. Life itself is not wholly physical and physiological but in the last analysis a spiritual process.

Each of these processes is grounded in and arises out of a universal process. The heart-beat of the world is the throbbing life of the school, the formative energy in teaching, and the germinal element of life. The total educational process is based upon a world energy transmuting the real into the ideal and the objective into the subjective. This creative energy fills the pupil with a force which enables him to work out actually what he is potentially—the doctrine of self-realization and spiritual freedom.

A philosophy in education becomes valuable to the teacher in proportion as it reveals the inner law of the school, as it vitalizes teaching, and as it furnishes the key which unlocks the mysteries of human life. According to this fundamental process in education, the energy which holds the world together is the force which unifies teacher and pupil, organizes mind and subject-matter in teaching and creates the tension of human life. The problem which this book attempts to solve is to trace this energy down through the world, through the school, through the teaching process, through mind and life and to give this formative principle an intense practical application in school management, in teaching the common branches and in the interpretation of mind and life.

The model lessons are analyzed and planned in harmony with the universal process and are thereby given a deep significance. These type studies illustrate the fact that practice is in and through theory and that theory is in and through practice. The

purpose of these lessons is to assist the teacher in applying these fundamental truths to the practical problems of the daily recitation.

Pedagogy is not a conglomerate science of Psychology, Philosophy, Sociology, Ethics, Æsthetics, Logic, History, Literature, Science and Religion. This pedagogical doctrine has a germinant truth which organizes these departments of knowledge into a new and systematic whole. Pedagogy has its own creative and constructive thought-force which builds up an original science out of the above-named material. These subjects are not used in a haphazard manner but only to elaborate the germinant idea and to illustrate and perfect the central thought.

In constructing this doctrine of education, I do not claim originality in the philosophy embodied in the text. I have followed closely the great thinkers of the world, ancient and modern and their interpreters and have incorporated into this text those ideas and systems of thinking bearing directly upon the central thought of this theory and practice of pedagogy. My discussion of spiritual freedom is based wholly upon one of the great books of the world. I have trespassed upon many systems of thought but have attempted to reclothe these ideas with a newness of meaning drawn from actual experience in the school-room. There is a purposive repetition of thought throughout the text to keep constantly before the mind *the fundamental process in education*.

I am indebted to Prof. W. W. Black of the Chicago Normal School for reading the manuscript and making many valuable suggestions and criticisms.

ARTHUR C. FLESHMAN.

State Normal School, Slippery Rock, Pa.

June 1, 1908.

EDITOR'S PREFACE

PHILOSOPHY, in a purely speculative way, observes the operations of the soul, and endeavors to explain these operations in terms of law or method. When any considerable group of mental acts is found to possess common attributes, that group is set aside as a science. As organized data it is accepted for human guidance. Thus science is all the while growing at the expense of philosophy. But the unorganized and unrelated data lying everywhere in the philosopher's workshop still affords abundant exercise for speculation. There is no likelihood that the philosopher will lack for data. Then, too, if all phenomena were fully catalogued, there would yet remain to the speculative thinker many fundamental problems upon which for all time he may profitably exercise his reflective insight.

Thus philosophy is a constant norm in the world of thought. By it all tentative schemes of thought are tested. To it all systems of thought are referred for final orientation and validation.

Education, like a score of kindred studies, is a derivative of philosophy, and the value and significance of referring one's educational doctrine to its philosophic basis is apparent. This treatise is one of a group of kindred studies. The value of any attempt to formulate a pedagogical theory lies in

the following directions: (a) It compels its readers to go over, once more, the subtle and suggestive relations between pure and applied thought. (b) It should aim to make more lucid than do former treatises this relation. (c) Its value to the educator is conditioned upon the system of speculative thought upon which it rests for its validity.

It is apparent that one does, in applied fields of knowledge, his best work when he comprehends most fully the rational basis and the essential relations of his procedures. We do best what we understand most completely. Otherwise the empiricist and the "quack" would lead the world's progress. Teachers need to see clearly and fundamentally the movements of thought which in the instructional act they aim to develop. This gives rise to vision, the teleologic spirit, without which all teaching is aimless and futile.

Teachers deal so constantly with concrete matter, are so environed with unorganized thought-stuff, are so continually living in the realm of devices and special methods that it is easy for them to overlook the more subtle but none the less significant guidance that philosophy affords. It is well to pause betimes and ask "why" and "whither." The answer must come from philosophy. Speculative thought alone can give adequate account of the reason for our educational processes, and indicate in some fairly definite way the goal of all intellectual endeavor.

The justification of this new statement of the basis of educational procedure is conditioned largely

by its clearness of statement and its simplicity of treatment. Students of education should be able readily to comprehend the author's meaning. The need is not so much for another statement as for a more lucid statement of the fundamental doctrines that condition and make meaningful the processes of the school.

Many systems of speculative thought have been formulated. These necessarily vary greatly both in scope and in method of treatment. From the days of Plato until now philosophic systems of one sort or another have challenged attention and influenced the student of pedagogy. These systems of philosophy have run the circle of materialism and idealism. They are as unlike and as confusing as are the teaching processes of untrained teachers.

Germany, better perhaps than any other modern state, has produced philosophic minds. Naturally, the student of pedagogy seeks in modern German thought a basis for his attempt to formulate rational guidance for teachers. Among these German philosophers it is customary to select Hegel as guide and master. This is due to his radical departure from Fichte and Schelling in denying reality to both the subject and the object and in proclaiming that ideas are the only concrete realities. It follows that the first matter of moment is pure thought, the infinite idea. This idea later objectifies itself in nature, and then the idea regresses, turns upon itself, is perceived by the mind to be after all a product or process of its own activity. Thus, as

pure thought, the idea goes forth, like the dove from the ark, only to return to complete unity and identity with itself. This circle being complete it is a relatively simple matter to trace the idea in its circle and to predicate spiritual unity, identity, to the idea in all its wanderings from itself to itself again.

Pedagogy seizes eagerly upon this round of the idea and, balancing its status in its objective form with its status in its radically ideal or subjective form, erects a system of applied thought which has peculiar charm. Since this Hegelian idealism is so remote from sense realism it is comparatively easy to frame up a system of applied thought in a fairly definite and, at times, almost dogmatic way. There are no actual experiences near enough the circle to disturb the harmony of the thought movement.

The danger lies in its very perfection. It is difficult for the ordinary teacher to see the application of all this brilliant balancing of thought-school and real-school, just as it is likely to be difficult for those who do see the beauty of the theme to actualize it, make it real with flesh-and-blood children in an ordinary public school.

But the effort to reduce one's ideas to a system is well worth while. Each lives an experience that is unique. Philosophy is the test of this experience. Only in the realm of reflective thought do we find the basis for common understanding and that unity of meaning that makes for system and progress in teaching. We lose the best things in our experience

when we fail to make lucid and meaningful that experience in terms of law, in formulæ for guidance. Teachers need a clear grasp of a system of pedagogic principles before entering upon the actual work of instruction. This grasp of a theoretic system enables the young teacher to grow by reflecting upon the concrete experiences of his daily duties.

The tension between one's real and one's ideal, the awareness of failure to achieve in practice what one visions in thought, is on the side of the will called conscience; on the side of the intellect it may be called interest. Intellectual advance is thus seen to depend upon a vivid realization of the gap between one's theory and one's practice.

One's practice cannot rise above one's theory. To have no theory is to invite failure at the outset. To erect a high ideal, to establish an advanced theory is to make possible skillful teaching. It is the constant approach in practice to one's standards in thought that gives inspiration to teaching, that makes for large issues in the realm of the school. One's theory must not rise too high above one's experience lest the tension, the awareness of the gap, lead to discouragement and despair. For that reason it is always wise to couple with one's training in the theory of pedagogics actual practice in teaching. This practice gives one a personal experience to be tested and formulated after the fashion of one's theory, and it also gives one the only possible data, that of experience, by which to test the validity, the workableness of one's theory. The more

varied and real, and the less artificial and make-believe this experience is, the more valuable it becomes when organized into theoretic guidance.

The person who evolves a theory of education, no matter how coherent, gives little sympathy and affords less guidance to growing teachers unless that theory is found to organize and make meaningful the vast sum of concrete data given by actual experience in teaching an ordinary school. This volume is an attempt to explain this data of experience in terms of law and of philosophic guidance. The author has had an extended discipline both in the theory and in the practice of educational things, and presents in this volume his best thought as guidance for those who possess the hunger to know the meaning of every act of the teacher in terms of purpose and in formula of law.

M. G. B.

January 20, 1908.

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THE EDUCATIONAL PROCESS

THE SCHOOL PROCESS

THE CREATIVE PROCESS

I.

THE SPIRITUAL

THE School is created by a spiritual force which unifies teacher and pupil. The spiritual (nous, mind, thought, reason, ego) is the generative principle of the world, and the essence and truth of nature. It is in its vital nature, creative and constructive, and is the active element of all thought and all things. The laws of thought are, therefore, the laws of things. "The secret of the mind is the secret of the universe."

The Nature of Spirit.—It is the nature of spirit and spiritual organizations to thirst after ideal attainments. There is an energy in spirit known as "potential infinitude" which perpetually struggles for the highest good. The spiritual unifying principle of the school is a subtle force which not only knits teacher and pupil together, but has the power of transforming the natural pupil into a thinking being. There is an activity in and through the pupil which transmutes him into the realm of

law, order, and reason which is his other, ideal and true self. The school exhibits spirit as a process of working out through the teacher and subject-matter all the potentiality found in the undeveloped child.

To understand any thing, it is necessary to probe into its creative energy and to analyze its creative process. To grasp the inner nature of the school

The
Creative
Energy

and to understand its creative process, we are ushered into a study of spirit itself.

One of the knotty problems of the world is to gain a clear conception of the creative power of spirit. However, we are taught that its chief function is to separate itself from itself and to make itself its own "polar opposite." The school created by an organic unity of teacher and pupil is the polar opposite of mind. It is also the nature of spirit not only to create its otherness (the school) but to gain its freedom by a return from this creation to itself again. J. F. K. Rosenkranz says:

"Mind has reality only in so far as it produces it for itself."

Spirit stamps its own nature upon the school in the creative act and produces in the spiritual organism an activity akin to itself.

The
Formative
Principle

The living spirit not only creates the school, but is the formative principle of all things. Whatever is, is mind, thought, idea, before it becomes objective reality. The mind pencil exists before the material pencil. The ideal creates the real, but the real returns upon the ideal and performs that function for which it was created.

The house exists as idea before it springs into objectivity. Thought molds brick and mortar into a house. If it were possible to jerk out deftly the thought in the house, it would return to brick and mortar. Ships and railroad trains, bridges and cities are thoughts externalized. The world itself is a thought of God made objective, and all science, a process of unfolding, developing, and learning this thought.

In the last analysis the school and the world are at heart one. An explanation of the school and, therefore, of all educative processes rests upon the solid rock foundation of cosmic philosophy.

Universal
Tension

So far as we know, the universe is a creative energy constantly struggling between potentiality and actuality. This universal tension found in the physical world is transmitted into all organic existence. Within the plant there is a pent-up force which causes it to struggle for higher forms of life. The animal has an added increment of life, but still possesses the same tendencies to grow, to develop and to increase in size and strength. In addition to this same world energy found in the plant and the animal, man has the ability to set up his own ideals, and by force of mind to transmute himself into these higher possibilities. He has the ability to create an educational institution which he uses as a means of self-realization. The school is analyzed into the spirit of the teacher, and the spirit of the pupil unified and organized by the spirit of the world, the creating, originating, pulse-beating, harmonizing and world-producing energy.

The School Organism.—The inner nature of the school is found to be the ultimate principle of the world. The laws of nature and the inner law of the school are spiritual and can be grasped by thought only. Natural laws are great spiritual threads running through the universe which make it thinkable. If nature were without law or reason, it would be unknown to the human mind. Since knowledge is possible, mind finds itself in all reality, physical, institutional and educational.

Both the school and nature are governed by law or reason. A natural law and the law of the school may each be defined as an observed order of facts.

Natural Law In nature the flower blooms and the tree puts forth its leaves. In the school there is an organic spiritual unity of teacher and pupil. The human mind is not satisfied with uniformity in nature and in the school, but seeks a cause which explains this constant order of things.

The keen intellect of Newton demonstrated in mathematical and physical terms ("directly as the mass and inversely as the square of the distance")

Force the action of force which is the root-idea of law. Force is a form of thought and a form of things and is the inherent nature of the school organism. The educator is struggling to ascertain the nature and action of this spiritual force which is the creating, controlling and organizing factor of the school.

To understand the final cause or doctrine of the school and nature, it is necessary to examine that

phase of law which has for its object, the accomplishment of a function or purpose. The flower blooms that its species may be perpetuated. The spiritual creates the school that it may realize its essence,—freedom. Spirit not only produces itself in the school, but attains its freedom in its otherness.

Purpose

The thought of unfolding the spiritual nature of the child creates the school. The objective school returns upon the thought school and accomplishes the purpose of its creation. The external school is a means between a thought and its realization. Thought or reason is the essence of the school and the material, objective, fixed school is merely an auxiliary factor in the process. The mind school exists before the matter school.

Objective
School

Some educational thinkers are materialists and believe that the objective school is the real thing itself. Materialism teaches that matter seeks a central point, and if it realizes its ideal, it perishes. Idealism teaches that the essence of spirit is freedom, and that its realization is life and activity. The materialist thinks the school as dead; the idealist, as living, growing and developing. According to the doctrine of identity the material school is in and through the spiritual, and the ideal school is in and through the material.

Perhaps the deepest truth found in the study of the school is the fact, that the principle which creates the school is the subject-matter of all studies in the school. The thought or reason in science,

history, literature, and other subjects is at the same time the creative energy which produces the school. That force lurking in the school organism which causes it to come into existence and to grow, is the same energy (in nature) which creates the plant, the animal, society, the state, and the church, and causes them to grow and to develop into higher forms of existence. In each there is a struggle between the real and the ideal, the potential and the actual, and between what is and what ought to be. The unity between the ideal and the actual, the individual and the universal is never attained, but it is still the goal (gold) of all human endeavor. H. S. Nash says:

The Inner
Struggle

"The *may-be* and the *ought-to-be* gather in force on the frontiers of the *is* to daunt and disturb it."

This tension is the heart of the world and the life of the school. Through this struggle the real school is striving constantly to become the ideal school, and the real pupil, the ideal scholar.

The school is a spiritual process of working out actually through the teacher what the pupil is potentially. The school, society and the state are conditions in which freedom is realized. The spiritual creates and organizes the school and breathes into it the life of reason. The objective school is a means by which the spiritual attains its final purpose. It is spatial and is the embodiment of rational freedom realizing and recognizing itself in the objective school-house and school-plant.

Freedom
Realised

The spiritual energy creating the school is a similar process to the vital energy creating the oak. The productive energy of the school is as essential to its growth and development as the germinal matter of the acorn is necessary to the growth of the oak tree. In order that the acorn may germinate it requires soil, rain and sunshine. That the school may grow and function properly requires a teacher and a pupil as essential factors and the objective school as the non-essential. The school is an endogenous organism growing and developing from within. The law of its being originates from within and is not externally imposed. The inner law of the school is created by an organic spiritual unity of the essential factors. To understand this law and to follow its precepts require a close study of the unified action of the mind of the teacher and the mind of the pupil in the educational process. The school organism is an institution by which the individual pupil attains the consciousness of his own freedom.

Unity in Difference.—The spiritual is the central factor of the creative process of the school and binds the other two elements, teacher and pupil, into a unity presupposed in their difference. These organic elements could not be linked together, were there no common nature binding them. A pupil is a distinct entity from the teacher, but at the same time essentially related through the mutual element of spirituality. The consciousness of a pupil is inseparately related to

The
Inner Law

Pupil and
Teacher

the consciousness of a teacher, for an individual does not become pupil only in relation to teacher. We know pupil only in organic, spiritual unity with teacher and a teacher cannot exist only in relation to an individual to be taught. This relation which binds the two together is a spiritual force and cannot be ascertained by sense-perception, but by a process of thought.

The two essential factors of the school gravitate toward a third which embraces both and constitutes their ultimate existence. The pupil is essentially distinguished yet organically related to the teacher. Each has no meaning except in opposition to the other and no significance apart from the other. The ultimate meaning of teacher is wrapped up in pupil, and the essential nature of pupil is in and through teacher. We are finally led to think of the two vital elements of the school as a manifestation of a higher third. This third realizes itself by uniting its otherness in a bond of activity constituting the school. Recognizing pupil and teacher as "indivisible yet necessarily opposed, as incapable of identification yet necessarily related, we are forced to seek the secret of their being in a higher principle, of whose unity they in their action and reaction are the manifestation." Their distinction is found in their relation and their independence in their connection. "Hence, we are compelled to think of them both as rooted in a still higher principle, which is at once the source of their relatively independent existence and the all-em-

Ultimate
Unity

bracing unity that limits their independence." This eternal principle is the spiritual, which, in its highest manifestation, is the source of mankind and binds human beings together in an educational institution. The school organism presupposes a germinal principle which organizes and differentiates, which is life giving, and which moves the institution created to realize itself.

Race Experience.—The Orientals do not understand that spirit is free. The consciousness of spiritual freedom first arose among the Greeks. However, the ancient Greek spirit was not entirely free, but depended upon the impression and stimulus of nature. Their thinking was conditioned by coming in contact with the natural. They listened to the murmuring fountains and gave objective existence a subjective meaning. The Greek spirit was not only observant but creative, not only perceptive but interpretative. It had the power to comprehend the meaning of the external world and to translate it into terms of intellectual and spiritual activity. The Greek spirit is not self-determining, not yet absolutely free, but must rely upon nature to give the impulse to thought. The element of subjectivity not realized by the Greeks was found among the Romans. This people represent the dawn of the principle of subjective inwardness. The mind now turns in upon itself and becomes abstract and universal. A political constitution is placed over the individual which creates personality, legal rights and private property.

Evolution
Of Freedom

The creation of the State as well as the creation of the School is a subjective process which causes the individual to retreat into the inner sanctum of the self and has for its ultimate purpose spiritual freedom. The Germans, influenced by Christianity, were the first to attain the consciousness that man as such is free. They arrived at the doctrine that the freedom of spirit is that which constitutes its essence. They, therefore, really worked out the problem that the school is to the pupil what universal history is to the race:

"A progress in the consciousness of Freedom."

—G. W. F. HEGEL.

II.

THE TEACHER

THE School is a spiritual organism, created by the teacher unifying himself with the pupil through the thought and spirit of the world. It is, therefore, self-evident that the ultimate essence of both the school and the teacher, is thought.

Thought

In fact, a teacher could not exist without being the embodiment of reason, for a thinking mind presupposes a spiritual principle to be thought. Subject without object is unthinkable.

“The school is an organic spiritual unity” which grows and develops by the inherent power of reason which is not only the life of the world, but the essential nature of both teacher and pupil.

Spiritual
Unity

It is a fundamental law of spiritual life that thought can grow only by coming in contact with thought. The school is that organic process of uniting mind with mind, of fusing soul with soul, and of unifying life with life in such a manner as to strengthen all that is truest, noblest, and best in humanity.

The Function.—The teacher is the mediating, organizing, and directing agency between the pupil and the world of thought. It is the function of the teacher to analyze, to systematize and to present the subject of study in such a manner, that the unfolding order of the subject will

Function
Of Teacher

exactly correspond to the unfolding order of the mind of the pupil to be taught. The teacher must understand the logical order of the subject and the psychological order of the mind to be developed.

The teacher finds his true life in the thought processes of the world as embodied in all branches of study. The pupil finds his better self in the life of the teacher and, finally traces out the thought of the world through the modified thought processes of the teacher. The pupil realizes what the teacher idealizes. The teacher is actually what the pupil is potentially. What the pupil hopes to accomplish, the teacher has already attained. The teacher has realized to-day what thought was yesterday, and what the pupil is struggling to attain to-morrow. There is a constant stress or tension between the thinking teacher and the world to be thought, and between the pupil thinking the thought of the world and the teacher thinking the thought of the pupil.

The teacher should be to the pupil what the Great Stone Face was to Ernest. As Ernest grew into the likeness of the Great Stone Face, so should the pupil grow into the ideal character of the true and noble teacher. It is the law of life that we grow into the ideal which the soul sets up. This law is the fundamental principle of human life and is known as the tension between the real and the ideal, between what is and what ought to be. The teacher is not only the pupil's ideal, but he

Constant
Stress

The Law
Of Life

acts as a powerful incentive in drawing the pupil to that ideal. In fact the teacher is the pupil's other self, the better self, the ideal self, and should assist that self as he would help himself.

It should be the function of the teacher to present every lesson in such a manner that it will exert a dominant influence upon the spiritual forces of the world. The thought in every lesson should disturb the mind of the child, give him new ideals and new tendencies in life. Every lesson should be taught so as to affect the whole life of the child. Suppose the child is taught to-day that heat expands bodies. This truth illuminates his mind perhaps in his first lesson in reading, explains the origin and nature of winds and ocean currents in geography, and gives the expert scientist the fundamental principle in physics. If it be true, that every idea disturbs the entire life of the child—and it does—the teacher should not only know the subject in and through itself, but in terms of the pupil's life. Unless the teacher has that keen insight which enables him to penetrate into the dim future life of the pupil, and to realize the ultimate influence of a lesson, he has neither a moral nor a pedagogical right to assist in the educative process. The teacher must see arithmetic, history and geography as an unfolding process in the life of the pupil. He must be able to resolve lessons and subjects into the mental processes of the pupil and to bring them into unity with the pupil's entire life movement.

Every
Lesson

The Teacher's Characteristics.—The essential characteristics of the teacher are aptness, skill, tact, insight, enthusiasm, sociability, proper temperament, charming personality, ethical refinement, personal magnetism and knowledge academic and professional.

The apt teacher is one who is naturally adjusted to the profession and whose life seems to be in harmony with the spirit of the school. An individual having an aptitude to teach, to govern, to inspire and to elevate is a jewel of the first order and certainly has some divine guidance. Aptness is a characteristic difficult to describe but invaluable to the teacher. A skillful teacher uses the means and mental energy to an advantage and never permits the mechanical phase of the school to be in bondage to the spiritual.

Aptitude The skillful teacher becomes tactful by reducing the machinery of the school to the minimum and operating the school as a spiritual energy to the end of spiritual growth. Skill and tact are acquired by practice in and through a profound knowledge of the teaching process. To be tactful or skillful in teaching one must realize that the inner nature of the school is a spiritual process and that the external phase of the school and of teaching should be made to harmonize with the inner life.

No teacher can be successful and inspire pupils who is not enthusiastic. Enthusiasm in the profession or in the subject taught begets enthusiasm.

Without enthusiasm, some one says, one is already dead. There may be perfunctory Enthusiasm teaching without enthusiasm but no teacher devoid of this essential attribute will ever be classed among those who have been called truly great. Observe a room in the presence of an enthusiastic teacher filled with the missionary spirit and notice how the pupils are controlled as if by magic. A lazy, indifferent teacher, although a profound scholar, will be a failure in the school-room. But a teacher filled with enthusiasm and having a keen Insight insight into the structure of the school and the function of the teaching process becomes a past master in the profession. The teacher attains insight by a reflective study of the nature of the educational process. The teacher of insight is the individual who has a philosophical grasp of mind in interaction upon matter. It is a growth process and is attained only by persistent study and reflection.

Sociability is a charming virtue and a powerful element in teaching and in government, and absolutely necessary to a successful teacher. A charming personality captivates children, Sociability transforms chaos into cosmos, gives beauty and tone to the school and is a most potent factor in the make up of a teacher. The social teacher has personal magnetism and attracts as the magnet. The real teacher possesses a constitutional capability that baffles description and definition. The artistic teacher must have knowledge, it is true, but he must also have a keen insight into the inner structure

The Real
Teacher

and function of the school. Possessing these natural, temperamental capabilities and having a well-trained mind, the teacher is fully equipped to meet the problems of the school. He becomes artistic in his teaching and governs the school not from external authority but from internal spiritual power. The teacher has not really controlled the pupil, has not made him free, until he has caused him to control himself. In the light of reason, which is the supreme principle of both the world and the school, the pupil sets up his own standard of conduct and through his own freedom subjects himself to the inner law of his being which is also the absolute law of the universe.

The true teacher loves the profession, loves child life and has the power and ability to inspire pupils to higher life by causing them to study, to think, to learn, to grow. An ideal teacher should have the creative ability of an artist, the profound knowledge of a philosopher and an attractive and pleasing personality. To obtain the ideal of ideals

Cicero

in teaching, the teacher should acquire what Cicero sums up to be the requisites of a true orator, namely: "The acuteness of the logician, the subtilty of the philosopher, the skillful harmony of a poet, the memory of jurisconsult, the tragedian's voice, and the gesture of the most skillful actor."

The teacher should be a truth seeker and truth lover. Truth has been defined to be the complete correspondence of the objective with the subjective. It names and defines reality, that which is. The

mind lives and grows and breathes in an atmosphere of truth. Every truth grasped and thought by the human mind adds power and force to the individual. A true teacher must be devoted to truth, devoted to study, devoted to knowledge, and devoted to teaching. He is the apostle of truth, the guardian of mind development, and the cupbearer of intelligence. The teacher thinks and the pupil thinks, the teacher works and the pupil works, the teacher is devoted to truth "For Truth's own sake," and the pupil is devoted to truth for the teacher's sake and for his own sake. Truth mirrors goodness, beauty and the divine essence. It is through the teacher that the pupil gains a knowledge of truth and thereby attains his freedom.

Truth
Seeker

The Professional vs. Academic Training.—The teacher's knowledge differs from the scholar's knowledge. Academic instruction is a distinct process from professional training. The former ascertains the facts, relations, forces, processes and laws of a subject; the latter sets forth the mental processes found in learning a subject. The professional aspect explains the mind's way of thinking grammar, history and other subjects. It enables the teacher to think not only history but to think the mind's way of thinking history. Academic instruction is a single mental process of thinking the subject. Professional training is a double mental process of thinking the subject into the mind of the child and thinking the child's mind while thinking the subject.

**Professional
Training**

Professionalism requires a knowledge of the psychology of the subject in organic unity with the psychology of the mind. The psychology of a subject is not something added to the subject; it is in and through the subject. It is the necessary step which the mind takes in learning a subject. Professional training presupposes academic knowledge. It is impossible to think how to think a subject without first thinking the subject. A fact is a fact only as it is related to mind. Some one says:

"A fact is a thing made, and its maker is a process of thought, and this process of thought is a functioning mind."

Hence academic and professional knowledge are in organic unity and both necessary in the preparation of a teacher.

To teach successfully requires a thorough knowledge of subject-matter. The subject must be known in and through itself and in terms of related sciences. To teach English grammar in the most successful manner one should understand rhetoric, logic, psychology, linguistics and philology. To know a subject and to be able to teach it accurately and successfully, it is necessary to study it in all its relations. Scholarship or general knowledge is the first requisite in the preparation of a teacher. The teacher should have a knowledge of mathematics, science, history, language, literature and art before specializing in any particular subject. Since education is knowing

Scholarship

something of everything and everything of something, specialization logically follows general culture.

In addition to academic knowledge to be taught, a teacher must make a study of pedagogy, psychology, logic, ethics, sociology, æsthetics, philosophy and the history of education. These subjects give the student what is generally known as professional preparation for teaching. Professional training also includes observation of expert teaching and actual practice in a model school. Practice in teaching should be under the direction of an educator of large training and experience who can criticise and unify theory and practice. The student-teacher

Practice

should plan his own lessons, be responsible for government in teaching, and be permitted to teach under normal conditions. An ideal Model School is one in which the teacher initiates and puts into practice the best possible theory at hand and is not restrained by the critic teacher. If the teaching is not in harmony with the best educational doctrine, then the critic teacher should suggest the proper mode of procedure, but still the student-teacher must originate his own lesson plans.

Professionalism also explains the nature of the physical school. The outer school is the shell in which the inner spiritual school is housed. The physical school should be of such a nature as to assist the inner school in performing its true function. The inner unity of teacher and pupil determines the size of the school-room and the class to be taught, explains the mean-

The Inner
And the
Outer School

ing of school hygiene and school decoration and gives the key to school management. The condition of the school-room, the text-books and apparatus are physical means of spiritual activity. When the physical school is equipped to harmonize with the inner law of the school, then the ideal will attain its freedom in the real. The material school becomes the universal school and freedom in teaching has been realized. The freedom which the teacher has attained, is the ideal school properly functioning in the real. The struggle is now ended; peace and comfort are secured; ideal teaching becomes actual; the potential develops into the real; what ought to be, is. This unification of the objective and subjective school is rarely attained but should be the goal sought for in every educative process.

III. THE PUPIL

THOUGHT is the generative principle of the school; the teacher is the coöperating, coördinating and correlating agency, but the final purpose of the school is the spiritual freedom of the pupil. The pupil is organically related to the teacher by means of thought and grows and develops into spiritual life in proportion to the intensity of the mental combat between the teacher and pupil. The school may be defined as the spirit of the teacher flashing across the rising soul of the pupil in streaks of red, living thought of science, literature, art, history, philosophy and other subjects.

The School Essence.—The essential nature of the school is spiritual and not material. If it were possible to tie silk threads from the brain of each pupil to the brain of the teacher, these threads would represent the school from a materialistic standpoint. These material threads are the organizing principle and hold the school intact. The brain, however, is merely the physical basis of mind. Brain tied to brain does not constitute a school. Education is not brain development so much as spiritual development. Perceiving, imaging, thinking, learning and knowing are not brain processes but mind processes.

The
Material
School

Since the school has been defined as an organic spiritual process, let us, therefore, tie the minds of the pupils to the mind of teacher by an immaterial thread. This force of soul fusing with soul, this activity of mind in unity with mind represents in its deepest meaning the true nature of the school. The constructive principle of the school is soul unity. The ultimate essence of the school is the

The
Spiritual
School

living unity between the teacher and the taught who are opposite poles of the same reality, the school, but yet are at heart one. The thinking mind of the pupil harmonizing with the thinking mind of the teacher, creates an institution called the school. However, the teacher rarely has the power to think the pupils together in that organic unity characteristic of the true school. The connecting link becomes broken. Pupils are in the school-room but out of school. They may be materially present but at the same time spiritually absent. The heart of the school is found in neither the pupil nor the teacher. The inner *sanctum sanctorum* of the school is neither the spirit of the teacher nor the spirit of the pupil but the two unified and organized into one vitalizing power.

In the last analysis of the school the pupil sets up his own ideal and strives to transform his real into his ideal self. The heart of the school is finally located in the soul of the pupil struggling for self-realization. The process of transforming the real into the ideal and making every ideal a stepping stone to a real is the school-essence.

School-
Essence

The teacher assists in the educational process, but the pupil's self-evolution is accomplished by his own spiritual activity.

The cosmic principle is again seen to be the heart of the school. There is a world energy which transforms the possible into the actual. Scientists tell us that this universal force is transmuted World
Energy into all organic life. Since the school is an organic institution, its inner law, the tension between the teacher and the pupil, is at last transferred into the life and struggle of the pupil. This life-evolving principle, inherent in the child, ultimately becomes the inner essence of the school.

It has been said, as is the teacher, so is the school, but a more fundamental maxim would be, as is the pupil, so is the school. The pupil is the central factor of the school around which all The Pupil other agencies cluster. The school fund, the school-house, the teacher, the apparatus and the school authorities all coöperate toward the self-realization of the pupil. The whole educational process tends to the advancement and freedom of the individual pupil. The old theory that the teacher is the school, must be replaced by the more modern and fundamental theory that the pupil is the school.

School Management.—If this reasoning be correct, then all school government should be pupil self-government. If the school is evolved Pupil Self-
Government out of the inner consciousness of the pupil, then it would be logical and psychological to conclude that he and he alone should control the

management of the school. It has been demonstrated in recent years, that a school can be so taught that it will become self-governing. As soon as the pupil comes in contact with the community life of the school, he should be taught that he can and must assist in controlling the school. Pupil self-government comes from within rather than from without. It is created by subjective thinking and not by external authority. By means of friendly discussions concerning school government, the pupil soon realizes the importance and duty of self-control. He finally considers it a privilege and a duty which he owes to the community life of the school to help others to control themselves.

Democratic school government should not be thrust upon pupils, but should be the outgrowth of days and months of careful consideration and explanation of the nature and art of school management. Pupils should be taught that the school is an organic spiritual unity existing between teacher and pupil and when a pupil whispers in school or bolts a recitation he has spiritually cut himself loose from the school. As the pupil is the focal centre of the school he through his own volition can and may destroy it. He can do that which if done by all pupils would annihilate the institution. As

Outer Deed
Versus
Inner Spirit

the offence is internal and spiritual, the punishment should be inner and not outer. As he spiritually cuts himself loose from the school, he must be spiritually and not corporally punished. Lead him to see his error.

Let him meditate a day or two without reciting. The teacher might have him write a composition on whispering or bolting in order that he may see clearly his mistake. The pupil carefully analyzes the offence and finally concludes that the outer deed is but an externalization of an inner spiritual condition. The pupil is a spiritual member of the school and when he breaks the unity with the teacher and the school he must by an act of his own mind restore the broken unity. When a pupil commits a wrong deed it should be his duty and not the teacher's to right the wrong. Since the school is a spiritual organization the pupil and not the teacher can restore this broken unity by thinking himself into harmony with the life of the school. Suppose after the pupil has struggled sometime, he does not right the wrong. What is the ultimatum? How about corporal punishment or expulsion from school? Suppose some one should enter the school-room, upset the stove and throw the blackboard out the window. What should be done? The school would be destroyed by either act, and each should be punished corporally perhaps, expelled perhaps, but brought under subjection to law, kindly if possible, harshly if necessary. Then is pupil self-government a failure? Is the moral law a failure? Neither is a failure, but each embraces the highest ideals known in pedagogy and ethics.

A close study of pupil self-government reveals the fact that many petty troubles inside and outside the school-room may be settled by the pupils them-

selves. By this mode of school management pupils become more self-respectful, more thoughtful, more dignified and habitually more interested in the general welfare of the school. They are taught to

Results become useful and influential citizens of a school community and thereby prepared to become better citizens of a state or nation. By means of the elective franchise pupils soon learn to read character and to understand the importance of electing able and trustworthy officials. By studying the nature of community life the pupil sees clearly that it is his duty according to the common law, the statute law and the moral law to testify when called upon and to be actively engaged in securing the best government possible.

The final purpose of school government is to train pupils in the habit of self-government, self-control and self-direction. Conduct and order in school are secured through the teaching process. Teach to govern rather than govern to teach. The only government worth any thing in school is that obtained through interest and delight in the subject studied. Discipline through external means, by

Self-Control the authority of the teacher, by rules adopted by the Board of Trustees or by the State itself is not satisfactory unless it leads the pupil finally to control himself. The external means to secure this inner condition are a thorough and systematic knowledge of the subjects to be taught, artistic skill in teaching and managing a class, love for the child and love for the profession and a

determination to succeed by moral suasion rather than by brute force.

Pupil self-government is the ideal to be aimed at in all school management. However, special pupil organization seems to be "useless experience and expensive machinery." The School City, Democratic government as worked out in the Chicago schools, and the George Junior League of New York are examples of modern ideas in school government.

Universal Synthesis.—In an ideal school there is a universal synthesis between teacher and pupil and between the various forces and factors of the school. It is the function of the school to cause the pupil to realize the spiritual principle which exists in his own nature and which is the ultimate reality of all things to be studied. The universal is the unifying force of the school and binds all parts into an organic whole. In studying the creative process of the school the student should "find the unity of law under the difference of facts, and the unity of a higher principle under the difference of laws." This insight into the inner reality of the school reveals a necessary spiritual interrelation between pupil, teacher and subject-matter. To grasp a knowledge of this complete synthesis of the school leads the individual gradually into a unity of the world other than himself and the school. This fundamental principle which organizes the school and which is one with the eternal reason of the world is finally transmuted into mind terms by the pedagogical student.

The
Unifying
Force

The pupil does not lose his identity in the school organism, is not wholly absorbed by the superior thought of the teacher, but should be the initiative force in the educational process. Modern pedagogy puts emphasis upon the initiation of the pupil in the recitation. He studies, thinks, originates, plans and in some schools formulates the course of study through his own process of thought. The class is formed in a social group and the recitation is begun by the pupil making a formal statement of some fact. This statement may be questioned, denied or approved by a further discussion of the subject. This fact or principle is further elaborated by some one, and the entire recitation is based upon the mental movement of the pupil guided and directed by the teacher. Notwithstanding, the pupils may have full control of the recitation, there is a complete synthesis of mind, heart and soul of the pupils and the teacher becomes the final authority and source of knowledge on all subjects. The pupil takes the initiative in government, in instruction, on the playground, in literary societies, and is constantly trained in those problems requiring original thought. In the trichotomy creating the school, the spiritual synthesizes, the teacher analyzes and the pupil through his own creative energy makes the organism complete.

Freedom Realized.—The pupil is the focal centre of the school from the view-point of both instruction and government. He is seeking freedom in

The
Initiation of
The Pupil

knowledge and freedom in control. His actions are free when control arises from within, and his thoughts are free when he finds behind all existence, material and institutional, a self-activity, a soul akin to his own. The knowledge process is complete when the pupil finds himself in everything, in the school, in literature, in science, in art, in history, and in all studies. The managing process is complete when the caprice of the pupil is changed to harmonize with the rational order of the school. Law and reason are characteristics of both the pupil and the school, and when the pupil conforms to the divine order of the school he realizes his true worth and destiny. The law and order of the school harmonize with the rational order of the universe. The pupil must lose his life in this rationality in order to find his life truly realized. The school is the rational nature of the pupil "writ large" to which he must respond in all his acts and forms of conduct. The ultimate ideal in the school process is the self-realization of the individual pupil. This put in other terms, is rational freedom which elevates the pupil into the highest plane of life possible. The law of the school now becomes the law of the pupil in and through the law of the world. The creative process of the school becomes the life process of the pupil in and through cosmic processes which are the manifestation of reason itself. This universal principle of reason is the creative and constructive force of the school and is the deepest principle found in human

nature. Since both the school and the pupil are manifestations of this principle of reason, the supreme element in both is not mechanical and material, but rational and spiritual. The pupil becomes free, has realized his true nature when conduct and control spring up in the life of the pupil spontaneously without the aid of an external organization. The pupil obeys the inherent law of his own nature, and his actions in school are regulated by this divine principle. The pupil realizes his freedom, attains his ultimate good and highest state of pupilage when his life is made to throb with the life of the school in and through the life of the world other than himself.

THE SCHOOL PROCESS

THE INSTRUCTIVE PROCESS

IV.

THE ORGANIZATION

It has been stated that the subjective school is created by an organic unity of teacher and pupil through the thought of the world. Corresponding to this ideal school, the objective school must now be organized as a means to the realization of the school idea. The creative principle in the subjective process now externalizes itself in the objective organization.

To organize a school is to secure a definite relationship between teacher and pupil, to form classes, establish grades, and to program the whole movement. Pupils must be carefully seated, skillfully moved, and artistically questioned. Books and apparatus should be used at the proper time and in the proper manner. The external relationship of teacher and pupil should harmonize with the internal activity of the ideal school.

The Class.—Pupils having the same advancement and reciting at the same time and place form a class. Pupils forming classes must be in unity with the subject-matter, in unity with the teacher, and in coöperative unity with each other. The class is an organism within an

organism; a function within a function. Classification does not depend upon age, nor primarily upon the physical condition of the child but wholly upon intellectual capacity. Pupils who can think the same subject-matter in unison with the teacher constitute a class. To teach the class is to teach the social mind organized out of the individuals. The social consciousness of the class is the individual mind of all pupils centered upon one thought. The teacher's mind must harmonize with the social mind and at the same time be in active unity with the thought of the lesson. Class instruction is much better than individual instruction; it inspires the pupils to greater activity; it creates a spirit of emulation among the pupils and produces a higher form of mental activity in the pupils. While no two pupils may have the same degree of progress, all should have approximately the same scholarship to be in the same class. To classify pupils properly it is necessary to make frequent promotions based upon accurate scholarship. Pupils are frequently well classified in arithmetic and at the same time are not well classified in reading. The classification may be good in grammar and poor in history, but real classification means a general average of the pupil's knowledge in all the subjects. Good classification naturally leads to good gradation. Good gradation is in and through good classification.

Social
Mind

Dr. Wm. T. Harris writes:

"That a properly conducted class recitation is of far greater value than individual instruction is obvious from the consideration that the contents of the lesson are stated over and over by different pupils of the class, criticised and discussed, illustrated from the experience of different pupils, and the pupil has the advantage of seeing how his fellows encounter and surmount such difficulties as he himself meets."

Class
Recitation

The Grade.—The grade is an organic part of the course of study and is based upon the growth and development of the mind of the pupil. Pupils constituting a grade move through school life at the same time. It is exceedingly difficult to grade pupils in all subjects accurately on account of the varied ability in the different branches. The grade may be ideal in reading but imperfect in arithmetic. In order to preserve a well graded school, it is necessary to constantly adjust the pupils to new grades to correspond to their advancement.

Dr. Arnold Tompkins says:

"As a school is truly classified when the members of a class can join with the greatest profit in the same act of instruction, so a school is truly graded when each pupil in his forward movement follows the continuity of ideas determined by the natural growth of his mind."

To grade a school requires a prearranged course of study based upon the law of child growth and development. In attempting to work out a graded system it may be necessary at first "to cross grade." Perhaps it may be necessary for three pupils of the fourth grade to recite arithmetic in the third grade. This pseudo-gradation will gradually develop itself

Gradation into a clear-cut distinction and arrangement of perfect grades. School organization and gradation must always respond to the inner subjective school. A grade must never be fixed and mechanical but flexible and adjustable to the life of the school. A school is a living and growing organism and must gradually throw off the outer shell to give vent to inner growth. Perfect gradation, promotion and demotion should be based upon the actual work done in the daily recitations rather than upon examinations. Written tests may constitute a part of the daily work but formal examinations should not be made the entire basis for promotion and gradation. "The Lock-Step" problem in education may be solved by adjusting monthly the outer mechanical phase of the school to the inner spiritual movement. The outer form must grow and change itself to harmonize with the inner throbbing organism. The ideal school is struggling with the real, the individual with the universal, the what is, with the what ought to be. Again we find the heart of the school to be a polarity between two opposing forces.

The Program.—No school can be taught successfully without a definite program of daily recitation and study placed in such a position that both teacher and pupils may see at a glance the movement of the school. This program should be flexible but at the same time it should be the basis of all school work and be in harmony with the course of study. It is just as necessary to run a

school by a program as it is to run a railroad train by a time-table. There will be just as many collisions in the school as on the railroad; as many disastrous wrecks of the mind in the former, as wrecks of body on the latter. By means of a daily program of study and recitation pupils are kept in organic unity with the teacher not only in the recitation but also in the study hour because they are tracing out the thoughts planned by the teacher in the lesson assigned.

School organization presupposes a definite program of study and recitation thought out and lived through in the mind of the teacher before the first day of school. The teacher must think and live the first day in idea before he ^{The} _{First Day} experiences it as an objective reality. Such a definite method of procedure planned before the organization of the school gives the teacher confidence, ease, and equipoise, and enables him to move quickly and accurately in unifying the various forces and factors of the school.

How to Organize.—In order to organize a school it is essential to have a definite knowledge of the classes and grades, of the size and condition of the school-room, and to understand thoroughly the course of study to be taught. Having these prerequisites in mind, a school should be so organized that in a few moments each pupil will be actively engaged in studying and reciting. After a few preliminary remarks (the shorter, the better,) the teacher announces that each pupil may look over

Organization the first reading lesson. While studying these lessons, the teacher hears a preliminary lesson in arithmetic and at the same time assigns a lesson in grammar. He then hears each lesson in reading and assigns the next lesson for study, and in three minutes after the school is called to order each pupil is studying and reciting and the school organism is performing its function as accurately and harmoniously as on the middle or last day of school.

Prior to this actual organization a school must be secured, a contract made, the teacher located, and a full knowledge of the what, the when, and the how of the first day of school. The opening exercise is the first act in the preliminary organization because it focalizes and unifies all minds to a common school thought. These exercises should be scriptural, literary, scientific, historical, biographical and mythological.

The Inner vs. the Outer.—As all content has its form and all noumena, their phenomena, so all the elements of the inner subjective school have their corresponding external objective phases known as the machinery of the school. There is a military side of the school; calling classes, arranging apparatus, receiving and dismissing pupils, but this material phase of the school process is but a means of the deeper movement. When too much attention is given to the mechanism of the school the higher spiritual life is destroyed. The highest ideal is not military precision, but

**School
Machinery**

thought precision; not the manipulation of school means but the manipulation of mind in the total educational process.

The fundamental principle underlying the complex activities of the school is the inner law of the school organism. "The law of an organism is its own inherent energy moving forward by variety of functions in unity, to realize the end which called forth the organism." Within the school there is an inherent force (mind in unity with mind) which causes it to accomplish the purpose of its existence. Also within the plant, animal, state, church and school there is a pent-up force (energy struggling with energy) which seeks its realization through a tension of the ideal and real, a polarity between the actual and the potential and a warfare between appearance and ultimate reality.

Law of an
Organism

The external school realizes its purpose by changing the pupil from his original nature to his ideal nature.

"Nature means that highest possible reality which a living thing, through a series of voluntary acts, originating within or without it, may be made to attain."

THOMAS DAVIDSON.

The objective school must create within the pupil a desire to study, to grow, to excel, to do good in the world and give him a thirst for knowledge and a craving for higher life. If the pupil does not respond to the throbbing life of the school some incentive must be used as a means of stimulating

him to greater activity. Artificial incentives, as prizes, books, medals, tickets and percentages do not reach the inner life of the child, and hence should be rarely used to induce pupils to study. They are not in harmony with the law of self-activity which teaches that nothing artificial should ever intervene between the thinking mind and the world to be taught.

Natural incentives are desires which harmonize with the law of effort and the law of self-activity. Dr. E. E. White enumerates them as follows:

- | | |
|------------------------------|----------------------------|
| 1. Desire for good standing. | 6. Desire for future good. |
| 2. Desire for approbation. | 7. Sense of honor. |
| 3. Desire for knowledge. | 8. Sense of right. |
| 4. Desire for efficiency. | 9. Sense of duty. |
| 5. Desire for self-control. | |

The school causes the pupil to externalize himself in his ideals; his individuality is changed into essentiality; the individual is made to accord with the universal. It is the purpose of the school to trace in nature, in the human mind, in social institutions, in history, in philosophy, and in religion, the immanent reason which is the origin of all things. This reason is not an ethereal something seen on the border land of dreams, but is the indwelling and informing life of the universe itself. The school also aims to discover this underlying unity of nature and mind, and to indicate how reason reveals itself as the indwelling life of science, art, morality and religion. The final purpose of both the external and the internal process

Immanent
Reason

is to teach the doctrine that every individual thing in the world arises out of some universal law of reason.

"This universal principle of reason is the creative and constructive force of the universe. It is seen in the architectonic principle, which is the soul of the plant, in the creative and sustaining power in the animal and in man, in the formation of character, in the building of institutions, in the development of church and state, and of the arts and sciences."

J. C. HIBBEN.

As all cosmic processes are the manifestation of reason, so are all school processes a form of some mental activity in interpreting this reason. The deepest principle in the world is the Cosmic
Processes organizing energy of the school. As all forms of nature were created by this eternal principle of reason, so are the outer forms of the school derived from this immanent principle. As the laws of the physical universe are ideal, so are the laws of the school spiritual. Neither the school nor the world is material and mechanical, but both are rational and spiritual. The school and the universe are processes in the development of reason. It has been said that "all history is an evolution of this reason in the progressive unfolding of its inner activity." We have said that science is a process of tracing the universal thought of the world. Art is a manifestation of the spiritual in the sensible. Philosophy is a thought interpretation of the universe.

The educational process changes the individual into the form of universality. This is a form of the

spirit's growth toward self-consciousness and has been called spiritual freedom. Education is a process of changing the potentiality of the child into actuality; it is a transition of the individual pupil into a world-comprehending process. Education is essentially a philosophical process; it is a study of thought as manifested in mind activity and revealed in the structure of the universe. Education teaches us that,—

“Amidst all the mysteries by which we are surrounded, nothing is more certain than that we are ever in the presence of an Infinite and Eternal Energy from which all things proceed.”

HERBERT SPENCER.

V.

THE RECITATION

THE recitation is that part of the instructive process of the school in which the pupil thinks over what he has learned, and communicates his thoughts to the teacher and the class. The recitation is a mental movement through the thought of the lesson and an accurate expression of its meaning and significance. Pupils should not be required to repeat or recite "words, words, words." The thought of the lesson should be expressed beautifully in the language of the pupil. Reciting requires thinking; thinking leads to expression; and expression fixes impression and reflection.

Reciting

The Purpose.—The purposes of a recitation are: To excite interest in study, to train in correct methods of study, to ascertain how much the pupil has studied, to give explanations, to approve, to criticise, to stimulate, and to inspire to higher life. It should be the aim of every recitation to see that pupils understand the lesson studied, to deepen this knowledge so that "the mind will act again as it has once acted." Each recitation should review the previous lesson, discuss the present one and make a preliminary study of the next one. In reciting pupils are drilled in thinking, studying, learning and power of expression. According to J. G. Fitch the objects of a recitation are:

Aim in the
Recitation

1. To find what the pupil knows, to prepare him for instruction.
2. To discover his misconceptions and difficulties.
3. To secure the activity of his mind, and his full coöperation.
4. To test the result and outcome of what you have taught.
5. To determine the pupil's readiness or ability to go on.
6. To test yourself as his teacher.

A Good Recitation.—The qualities of a good recitation are a lively attention, a mastery of the lesson, promptness, dispatch, order, enthusiasm, and a happy disposition on the part of both teacher and pupil. A perfect recitation is one in which pupils recite accurately, freely, and joyfully. It is one in which the teacher talks less, but causes the pupil to think and to express himself more. The true teacher has such consummate skill and insight into the nature of mind and subject-matter as to hold the school organism intact and cause each unit to function properly. In a good recitation both teacher and pupil must thoroughly understand the lesson, the mechanical friction must be reduced to a minimum and spiritual unity of teacher, pupil and thought must be made the crowning purpose. A lesson is successful when order is maintained, when interest is secured in the subject, when proper means are used to attain certain mental steps and to inspire the pupils to hard work.

To conduct a good recitation, there must be harmony and good will between teacher and pupil, a deep interest in the subject studied, an exhaustive and spirited discussion of the lesson, and on the part of the teacher a profound grasp of the funda-

mental law of teaching. The outer mechanism of the recitation must breathe the spirit of the inner subjective nature of the school. The subjective school externalizes itself in the recitation. All the forces operating in the school are focalized and centralized in the recitation of a lesson. This is the central activity and pulse-beat of the school and success in the recitation means that the outer school has realized its final purpose. The ultimate purpose of all educational processes is objectified and attained in the recitation. The school fund, the school-house, the apparatus, the academic and professional training of the teacher are all put in the recitation. It becomes successful and artistic when there is accuracy and beauty of presentation, and when all mechanical means are subordinated to spiritual activity.

Forces
Centralized

The length of a recitation should depend upon the age of the pupil, the nature of the subject studied, and the surrounding conditions. The recitation period in the primary grades should usually be short. However, in the school-garden, in the school-kitchen, in the laboratory, and in the study of actual concrete nature, the period of the recitation may be lengthened on account of the exciting surroundings. For more advanced pupils a longer period is possible and necessary. In the higher subjects more time is needed for the discussion of a lesson. The pupil's mind is able to follow a train of thought longer and the recitation now becomes an intense process

Length
Of the
Recitation

in spiritual development. Recitations should be so coördinated that the interest gained in one should be carried over to the next. Sometimes in the study of a poem, a mathematical problem, or a scientific experiment, the lesson may continue a week. In the study of "The Chambered Nautilus," in the solution of the Pythagorean theorem, or in the physical demonstration of the rotation of the earth by the Foucault Experiment, the same lesson may continue profitably for several days. In general the recitation should have sufficient length to discuss thoroughly all the important thoughts contained in the lesson. The recitation period as well as the other educational processes, has a tripartite nature: An introduction, a discussion and a conclusion. The introduction should not only outline the next lesson briefly, but unify the present lesson with the past one. The discussion should proceed according to some logical plan thought out. The conclusion sums up the points in the lesson and should be full of feeling and inspiration.

Parts of a
Recitation

Method in the Recitation.—There are many mechanical ways and plans of conducting a recitation. Pupils may recite in *concert* in reading, in number work, in reviewing historical facts, in stating principles in grammar, arithmetic, geography and physiology and in learning definitions and quotations *verbatim*. This is purely a mechanical mode of procedure and should be used only occasionally and for variety

The
Socratic
Method

sake. The *Socratic* or *catechetical* method is valuable in thoroughly testing the pupil, in logically unfolding the subject and in introducing new and related matter. E. E. White says:

“There is no test of knowledge as searching and thorough as a skillful question.”

Skill in asking questions is attained by a true insight into the essential movement of the mind of the pupil in learning a subject. While books on questioning are of little value a few general directions may be helpful to the teacher. Questions should be clear, concise, definite, logical, to the point, adapted to the capacity of the learner, and never ambiguous. Questions should be avoided that give a choice between two answers and that exercise the memory only. Direct and set questions are of little value in the teaching process. The object of the catechetical method is to find out what pupils know, to ascertain what they need to know, to awaken within them a curiosity to know, to arouse the mind to action, to illustrate, to explain, to give knowledge, to fix knowledge in the mind and to secure thoroughness. In the Socratic method a few cautions should be observed: Ask questions only once, vary the questions, begin with easy questions, let questions be connected, do not suggest the answers, ask questions distinctly, do not ridicule answers, never tell what the child can tell, question the lesson into the mind and question the lesson out of the mind.

However, the question method does not drill the pupil in the power of thought and expression as well as the *topic* method. By reciting topically, the
Topic pupil gains a mastery of utterance and
Method an ability in the systematic arrangement of his thoughts. It cultivates his expressive powers, gives him a facile use of language and initiates him into the realm of forensics, debating, public speaking and oratory. The topic method gives both the teacher and the pupil an opportunity to introduce supplementary matter in the recitation.

Pupils may be called on to recite in a *consecutive* or *promiscuous* order. The former has the advantage in point of time and the latter in point of attention. While the consecutive method is easier for the teacher the promiscuous method keeps intact the organic spiritual nature of the school. The
Lecture *lecture* method is perhaps the best for
Method advanced classes provided the pupil does the lecturing. He prepares a talk on the eye, the Pilgrims, the infinitive, Evangeline, Cuba or cube root and discusses the subject for twenty or thirty minutes in a masterly and inspiring manner. It develops the individual's self-activity and is a much better method of review than the formal written examination. In general the *oral* method is adapted to child life and the *written* method for more advanced students. However, both may be used successfully throughout the entire school work. The written method gives the child the mechanics of learning and aids pupils in the higher grades in

studying and preparing a lesson in a systematic manner. The skillful teacher will devise some written work in almost every recitation. It gives definiteness to preparation and assists the mind in gaining and retaining knowledge.

The *concrete* method with objects, diagrams, the numerical frame, geometrical blocks, the globe, the eye or heart is the form of instruction for the elementary grades. The *abstract* method, using rules, tables, definitions, principles is adapted to mature students. While the general law of these methods has been stated so far as the common school is concerned, the concrete method is also used in universities. Botany is studied with the plant in hand, geology by observing and collecting specimens and chemistry by using the concrete elements in the laboratory. The abstract method must be used in the lower grades in fixing certain principles and in gradually leading the child as his mind develops from concrete reality into the realm of abstract thought.

Concrete and
Abstract
Method

The *synthetic* method of going from parts to wholes, of beginning the study of geography at home and the study of grammar by words, sentences and then discourse, is the primary method. The *analytic* method of proceeding from wholes to parts, of beginning geography with the globe and grammar with the sentence, is the movement of mind best suited to advanced thinking. However, the movement of mind is

Synthetic
And
Analytic

analytico-synthetical in gaining knowledge. According to the inner law of the mind it first seizes the object indistinctly, then analyzes it into its definite elements, again fixing its attention upon the isolated attributes and lastly unifies and organizes these elements into the original whole. Every process of analysis must be supplemented by a process of synthesis. As the pupil analyzes the eye he synthesizes the parts and as he synthesizes he further analyzes until he attains a definite and thorough knowledge of all the attributes and parts. Every subject taught must include both methods, because these methods embrace the law of knowing, the law of thinking and the law of learning.

By the *inductive* method ideas are studied before words and examples before rules. By the *deductive* method the mind moves from general truths to particular facts. The analytic method is deductive, and the synthetic method is inductive. In the inductive method the teacher begins with the individual object comparing it with other individuals, noting likenesses and differences and gradually arrives at the development of the general notion. By observing a small stream of water, a creek and finally a river, the general notion of the river is derived as an inductive process. Solving problems in square or cube root by the blocks, and then formulating a rule is an inductive process. The old method of committing the rule to memory in arithmetic and then solving the problem is the deductive process. The deductive

Inductive
And
Deductive

method is used by studying the facts concerning the human body and then verifying them by actual observation; by studying a text-book on botany and then examining specimens of plants to illustrate principles, and by learning mathematical axioms and principles and then applying them in the solution of problems.

It seems from this discussion that there are many methods of conducting a recitation, many movements of mind in teaching and many different processes of attacking subject-matter. In the last analysis, there is only *one* method of conducting a recitation and that is the manner in which the mind identifies itself with the thought and spirit of the world other than itself. The problem in the recitation is the problem in philosophy—translating the subjective into the objective and ascertaining the objective to be the subjective.

Planning a Lesson.—A thorough preparation of the lesson by both teacher and pupil, a systematic plan of procedure and a proper assignment are essential factors in every recitation. To plan a lesson is to know the method in the subject and the method in the learning mind and to be able to transmute the thoughts of the lesson into the thinking mind. In planning a recitation the teacher works through the lesson, ascertains the exact thought and arranges and organizes it into teachable form. The teacher must analyze the subject to be taught into its mental

One
Method

To Plan
A Lesson

processes and see clearly the movement of the pupil's mind in grasping it. He must understand the law of psychology on one side, and the law of subject-matter on the other. The artistic teacher must adjust the developmental phases of the subject to corresponding stages of mind growth in the child.

In planning a lesson we should proceed on the assumption that education is an organic process of uniting two forces: Mind including its activities,

Education powers and processes, and subject-matter
Organic including its laws, facts and principles.

The educational process as realized in the recitation transmutes these subject activities into corresponding mind activities. The possibilities of mind become realities through the interaction of subject and object. The recitation is that artistic process of adjusting the growing mind to a similar mind process found in the subject studied. In order to illustrate the value and purpose of planning a lesson the following brief type plans are given.

In planning a lesson the means, mental steps, and the purpose should be noted. To teach the child the idea, foot, the teacher uses the foot-ruler. The pupil measures a foot on the desk and black-board, cuts paper a foot long and brings in objects a foot in length. To teach the idea, foot, pupils must see the tangible thing and then think foot in the abstract. They should be made to see that foot is not a certain length of a material thing, but that it is a certain portion of space in one direction. There are two steps in thinking foot: One seeing

a foot, and the other, imaging the meaning back of the material thing. The pupil must get a clear-cut distinction between material foot and ideal foot, foot in the mind and foot in reality. In fact foot is mental rather than material. The mind moves from the concrete ruler to the abstract idea of foot. To think foot is to unify the real with the ideal. The child cannot think material, for meaning is universal. To think foot is to understand that universal element which constitutes foot wherever it may be found. Thinking is seeing relations and is a process of translating the objective into the mind. The vital, living unity is at last attained, knowledge is obtained and spiritual freedom realized. The purpose or final aim in teaching foot is to gain a new idea which acts as an organ of knowing and which aids the pupil in mastering other forms of knowledge. Teaching the idea of foot disciplines the mind in seeing and thinking, and beautifully illustrates the process of the mind moving from the concrete to the abstract. From the material ruler the child ascertains the meaning or significance which alone leads into the realm of knowledge and freedom.

To Think
Foot

It requires a higher form of mental activity to think number than to think an object. Number is not an object, it is not a mental picture, it is not a figure, it is not a quality of an object, but has been defined by Newton as an abstract ratio of one quantity to another of the same kind. For a pupil to be able to think two-

To Think
Number

thirds, the teacher uses such means as crayons, balls, squares, chairs and sticks. It requires a higher activity of thought to think two-thirds than to think a foot. The mind first thinks the quality, shape and form, and then thinks away quality and thinks quantity. The category of quality gradually emerges into the category of quantity. External perception becomes internal perception and phenomenal activity takes the form of noumenal activity. To think a fraction is a triple mental act. The pupil first thinks two as a relational activity, then three, and lastly thinks them in relation, in one thought process. It requires a vigorous mind activity to think these tripartite elements, quality, quantity and relation in a single process. When the child is first introduced into the study of fractions he frequently fails in understanding the subject on account of a lack of mental power. The aim of this lesson is to train the mind in abstract processes of thought. The number idea leads the pupil into a form of mental activity necessary to gain any knowledge whatever. It trains the mind in that universal and fundamental form of activity which is found in the world other than itself. He attains æsthetic freedom by finding himself reflected in the foot and in the two-thirds which are types of his own life. The pupil delights in learning foot and two-thirds, because in these objects he finds his true ideal self mirrored. To awaken the pupil's æsthetic emotion gives him a tendency to higher life and an inspiration to seek truth, beauty and goodness.

"The curfew tolls the knell of parting day,
The lowing herd winds slowly o'er the lea,
The plowman homeward plods his weary way,
And leaves the world to darkness and to me."

To Think
A Poem

In planning to teach this quatrain, the pupil must first study the life of Thomas Gray and secondly get a clear idea of an elegy. The mental steps in teaching and thinking this stanza are perceiving the words, imaging the meaning, and identifying the self with the thought and feeling of the stanza. In studying any literary selection the mind is first directed toward the sign or word and then secondly toward the signification or meaning. The pupil should be taught the meaning of curfew, cover the fire; knell, the sound of a funeral bell; lea, a meadow or field; and parting, used by aphæresis, for departing. He should be required to think the poetic meaning of winds, to note the poetic effect of plods and the alliterative significance of "weary way" and "plowman plods." The next step is to think the stanza into poetic feet and to understand iambic pentameter. The pupil lastly identifies himself with the thought, rhyme and rhythm of the quatrain and translates it into his own life. In the musical flow he realizes the meaning of the syncope and the aphæresis. The final act in teaching and thinking the stanza is to picture the imagery, not only mentally, but in colors on paper. The spirit of the stanza is externalized, mind identifies its otherness and hence spiritual freedom is realized.

A Work of Art.—A recitation should be so planned, adapted, arranged and so enriched as to form a work of art. The ordinary teacher is usually satisfied with accuracy in the recitation, but the ideal teacher would add beauty. Browning says:

“If you get simple beauty and naught else, you get about the best thing God invents.”

To become a work of art, the recitation should express the free embodiment of thought in appropriate form. There must be a nice adjustment of thought to the lesson recited. The recitation must be conducted in an orderly plan and in written lessons. “Every sheet produced by pupils in school should be balanced in effect, and thus reflect some echo of the harmony of a work of art. Let a child once grasp the principle of balance and his every paper takes on a new and fascinating interest; he himself is no longer an artisan; he is exalted into the realm of the artist.”

A recitation is considered beautiful when the spiritual activity is not retarded by the mechanical means used. The external factors, the apparatus, the seating of pupils, the condition of the school-room and the manner of reciting must all respond to the inner life and energy of the school. For a recitation to be beautiful this energy must not be in bondage to the outer form or mechanical phase, but must move freely. A recitation becomes a work of art when there is free and easy movement of thought and when the outer

Adjustment
And Balance

Recitation
Beautiful

form assists the inner spirit of the school in realizing its true purpose.

In the recitation the freedom of the spirit of the child is conditioned in and through some external stimulus. It is a work of art because it assists in spiritual freedom. The activity of spirit is not free until it springs up unaided by the factors of the recitation. The recitation may be compared to the Greek Spirit because it is a mind process aided by the natural. The mind of the pupil during the stage of the development of the school recitation needs the excitement produced by the various external forces and factors embodied in the recitation. The student is not able to carry on an extended train of thought without the aid of the recitation stimulus. It is a work of art because it deals with thoughts, ideas and conceptions projected in tangible form. It deals with spiritual processes and aims at spiritual freedom. In the final analysis of the educational process, the teacher becomes artist, the recitation is transformed into a work of art, the pupil is metamorphosed in and through the spiritual energy of the recitation. The teacher is the Raphael, the recitation is the "Transfiguration" and the pupil is the being transfigured.

VI.

THE CURRICULUM.

THE movement of the mind, in the recitation, naturally leads to that larger movement of thought through the entire life of the school known as the curriculum. The curriculum or course of study indicates the stages of mind growth corresponding to steps in the development of subject-matter. The curriculum-maker must take into consideration the evolution of mind and the evolution of subjects.

The essential question is to adjust the various phases of subject-matter to such corresponding phases of mind activity that will neatly fit into the thought embodied in the subject. The logical order of subjects must again correspond to the psychological order of the growing mind.

Primary and Advanced. — In primary grades the content of subjects should be shallow, but the extent, great. The lesson should be made concrete, observational and experimental. The child is introduced into the world of spirit through the concrete world of reality. In advanced work the extent should be narrow and the content deep. University students pursue few subjects but make a more profound study of their specialties. According to Tompkins the common school deals with perceptions or individuals, the more advanced educational institutions, the understanding or gen-

erals, and the university, reason or universals. The movement of the mind from the individual to the universal is the law of the learning mind and the law of the unfolding order of knowledge. The Law of Learning The lower phases of knowledge are mastered by the lower phases of mind and the higher phases of knowledge by the more mature mind. The curriculum is an arrangement of subject-matter in the order of the development of the learning mind from the time the pupil perceives the individual until he is able through the dawn of reason to grasp the universal.

All subjects (history, geography, mathematics and other studies) have their perceptive, imaginative and experimental phase adapted to the primary grades. As the child's mind unfolds into higher forms of judgment, reasoning and intuition, these same subjects must increase in generality and depth of meaning until they require the highest form of human thought and the keenest mental insight to grasp their intricate purport.

Knowledge Related.—Dr. Edward Caird writes:

“Thought is possible only as the relation of the thing thought of to the thinker, and an object of thought can only be known or enter into consciousness in relation to the thinking subject.”

Not only is all human knowledge connected, science, literature, history and philosophy, but all reality is related to a thinkable reality. The thought in nature, in history, in man, in all things is not a thought which the human mind creates, but which

it discovers. The reason or thought found in nature and art is a universal principle which binds human knowledge into one organic whole. It is impossible to know any one thing thoroughly without knowing related ideas, thoughts and things. In the paraphrased language of Tennyson,—

If we knew the flower in the crannied wall, we should know what God and man is.

“From the very nature of thought,” says Herbert Spencer, “the relativity of our knowledge is inferable.” Every thought implies a distinction and relation, a likeness and a difference. The very idea of consciousness is possible only in the Consciousness form of a relation between a subject and object. Learning is the formation of a relation in mind parallel to a relation in the objective world. It logically follows that all knowledge is related and that thinking and thought can never express more than a relation. Knowledge is a life process since it is a continuous adjustment of internal relations to external relations.

The Principle of Correlation.—Correlation (concentration, coördination, interrelation) is a fundamental process in curriculum-making. It involves the principle of the relativity of knowledge and accepts the doctrine that all knowledge belongs to one organic whole. Correlation places subjects together in the curriculum that the universal content of each may be thoroughly taught and thought. It emphasizes the fact that the world

of thought and the world of things are inter-related ideas.

According to the doctrine of concentration the child to be educated determines in a large measure both the subject-matter and the method. The natural and social environments act upon the child and the child reacts upon these external energies. The human mind is constantly struggling to free itself by attaining the knowledge of the invisible, the truth of creation, the spirit of the world. All knowledge depends upon the activity of the mind through a thought process. A thought may be analyzed into elementary ideas. An idea is an interpretation of an external energy working through matter. All energy, cosmical and spiritual, has its origin in the Infinite and Eternal Energy.

Doctrine of
Concentration

See note!

This Energy transmutes a resident force into all being. This force originates and externalizes qualities and properties of bodies. These physical attributes are next translated by the educational process into the thinking mind. The mind attains its freedom by cancelling its estrangement and returning to itself.

The entire curriculum is based upon the investigation of the processes which take place in nature and in mind. Form is the manifestation of energy in nature and is the fundamental principle of all knowledge. The mental process of interpreting form is called observation. Size, weight, density, resistance, color, sound, odor, taste, and tactile

Thought-Relations sensation are essential thought relations found in all objects. By coming in contact with these attributes the child's intrinsic thought is developed and language is made a necessity. It, therefore, follows that teaching spelling, reading and composition is merely an incidental process in the evolution of the child's thought.

The Child In the construction of the curriculum, the center of correlation should not be history, literature, nor science, but the child. As the child is the central factor of the school, all subject-matter should be focalized in him. It should be so adjusted to the life of the child as to bring out what is best in him. The studies are best adapted to the evolution of the child's life which he loves best and which will do him the most good.

Doctrines of the Curriculum.—Dr. William James suggests that there should be subjects developing impression and others training in expression. The educative process consists in a series of reactions following a series of receptions. It is a process of grafting a native reaction into some form of school life. Out of this evolutionary doctrine of mental life flows the profound pedagogical principle—"No impression without expression."

Madame Campan changes this dichotomy into a trichotomy: "First I saw, then I reflected, and finally I wrote." In other words there is a taking-in process, an inside process, and out-going process.

Dr. R. N. Roark teaches that there are three operations of the mind: Acquisition, assimilation,

reproduction. The acquisitive processes are perception, conception, retention, and are cultivated by a study of nature, object teaching, the regular branches, and in the elements of all branches. The assimilative processes are conception, reasoning, imaging, willing, and are cultivated by a study of mathematics, language, history, civics, science and works of art. The reproductive process consists of the inner process of creation and the outer process of expression and is cultivated by a study of language, conversation, composition, declaiming, debating, and literary work in general.

Dr. E. E. White would construct a course of study from presentative knowledge, representative knowledge, thought knowledge. "A true course of instruction for elementary schools cuts off a section of presentative, representative, and thought knowledge each year." According to his doctrine the mind through school life is gradually passing from sensation to reason.

L. J. R. Agassiz indicates that the movement of mind in attaining knowledge is—first, observation; second, generalization; third, verification. Thomas Huxley says whatever is taught in the university should be taught in its elements in the primary school.

Colonel Francis W. Parker, in his theory of concentration, places the child surrounded by energy and matter at the centre of his system. The central subjects of study which surround the child's life and in which he is intensely interested are physics, chemistry, meteorology, astronomy,

geography, geology, mineralogy, history, ethnology, anthropology, zoology and biology. The modes of attention growing out of these central subjects are observing, reading, and hearing-language. Attention is organically related with expression which is defined as a manifestation of thought and emotion. The modes of expression are gesture, writing, speech, drawing, painting, modeling, making and music. The two modes of judgment, form and number, are indispensable mental factors in the acquisition of knowledge.

The Herbartians present many different courses of study based upon the principle of apperception. Herbart himself distinguishes three types of study: The merely presentative, the analytic and the synthetic.

Ziller classifies school studies into those pertaining to man and those pertaining to nature. The humanistic group comprises history, literature, art and languages. The nature group consists of geography, natural history, physics, chemistry, arithmetic, geometry, practical exercises and gymnastics.

Dr. William Rein of Jena coördinates the humanistic studies and the nature studies into a curriculum for his Practice School. The humanistic studies are historical instruction, art instruction and language. The nature studies are geography, natural history, arithmetic, geometry, practical work and gymnastics.

Dr. Charles DeGarmo would build the curriculum out of humanistic, scientific and economic material.

The humanistic studies such as literature and history have a distinct ethical content. The development of moral character now takes the place of intellectual culture. These subjects reveal the moral order of the world, which must flow into the life of the child. The scientific core has no ethical content but has high educational value. The economic group represents man in interaction with nature. It seeks practical ends and aims at physical freedom of the individual.

Dr. Edward R. Shaw in his "Outline of a Course of Study for Elementary Schools" uses each core as material from which are induced activities of arrangement and expression. In the humanistic group the materials are myths, tales, stories, descriptions, songs, poems and pictures. The induced activity of arrangement and expression growing out of this material are reading, language, spelling and drawing. In the scientific group the materials are land, water, sky, seasons, plants, animals, minerals and forms. The induced activities produced by this material are numbers, modeling, moulding, measuring and singing. The materials of the economic group are food, clothing, shelter, industries, occupations and travels. The activities created by this material are writing, drawing, paper-folding, sewing, making, painting, buying and selling.

Dr. William T. Harris has apparently solved the problem of the psychology of the curriculum. According to his analysis, there are five windows

of the soul (subjective) to which correspond five groups (objective) of studies: First, mathematics and physics; second, biology; third, literature and art; fourth, grammar and language including logic and psychology; fifth, history and institutions. The curriculum should be built out of this material in such a manner that each group should be presented at times to suit the development of the child. Each group of studies represents certain objective categories which develop certain internal laws of thinking. According to Aristotle there are ten objective categories: Substance, quantity, quality, relation, action, passion, where, when, posture and habit, which correspond to the development of the internal constitution of the human mind. The categories are the predicates used by the mind in thinking the world of objective reality. To exhaust the categories in describing an object is to exhaust the possibilities of explanation. The categories, therefore, express the nature of thought and the nature of things.

Arithmetic and geography involve a study of the categories of quality and quantity. Physiology adds the categories of action and relation and discusses the formative life principle. Grammar Grammatical study is a dual mental act: One directed to form and the other to content; one to the real, the other to the ideal; one to the sentence and the other to the meaning. In analyzing the English sentence, the mind is

ushered into the realm of logic and psychology. Dr. William T. Harris says:

"The method of grammar leads to insight into the nature of reason itself; it is this insight which it gives us into our methods of thinking and of uttering our thoughts that furnishes the justification for grammar as one of the leading studies in the curriculum."

Reading, penmanship and drawing externalize the inner man and reveal and portray human nature in its varied forms. The genetic principle of literature is life itself. It represents the soul striving to realize its inherent worth. Pen-
The Soul
manship, drawing and art in general represent the highest functions of the human soul. History and civics reveal to man the consciousness of his own freedom. In these subjects the student is ushered into the realm of spirit itself. He is taught the nature and end of spirit to be freedom, and that this freedom is attained through the state, which is the terrestrial representation of spirit.

The Ideal Curriculum. — The ideal curriculum should be so constructed that it will bring out what is best in the pupil. It should be flexible, adapted to the circumstances but constantly moving toward the idea of personal freedom. It should put stress upon relations and interconnection of studies and thereby unify, focalize and organize the child's knowledge. History should be corre-
Correlation
lated with geography and civics. There is an interconnection of ideas in these subjects and to understand one is to know the other two.

Composition should be taught in connection with nature study, pictures, drawing, history, biography and literature. Correlating and interrelating are not only pedagogical processes but are also psychological processes. The correlating process is valuable in the construction of a curriculum because thinking is itself a relating process.

The ideal curriculum cannot be described in terms of subjects enumerated to accord with the doctrines of all educators. A convention of educators were recently formulating a course of study for Normal Schools. One member suggested that sociology be substituted for some review work done in the common branches; another would substitute a study of Greece, Rome and England for the usual text-book in general history; still another urged that astronomy should take the place of Logic; another educator would substitute ethics for Latin, German or French for trigonometry and surveying or chemistry for Greek.

To one making a close study of this discussion, it seems that the men trained in science prefer scientific subjects and those trained in metaphysics insist that Logic and ethics belong to the Normal School curriculum. The particular bent of mind of the educator rather than the educational value of the subject may be traced in all courses of study.

The ideal curriculum can be constructed only by the aid of psychology and philosophy. The final question is what effect has a given subject

upon soul development? If Logic will make a clearer thinker and create a higher spiritual development than astronomy then it has a higher educational value and should be preferred in the construction of a curriculum.

Dr. Arnold Tompkins writes:

"Since the pupil is to find his true self in the thought and spirit of the world about him, whatever subject reflects in his consciousness the widest realm of that thought and spirit must have for him the greatest value."

Educational psychology assists the curriculum-maker in determining the value of a sub-
ject in terms of human development. It Educational
Values teaches that a given subject strengthens a given power of mind.

"Philosophy deals with the totality of experience under the form of an organic system in harmony with the laws of thought."

—SCHWEGLER.

THE SCHOOL PROCESS

THE HUMANISTIC PROCESS

VII.

THE SOCIAL

THE school is created to give instruction, to unfold the inner life, and to develop those broader phases of human growth known as the social, the æsthetical and the ethical nature of man. The humanistic process not only strengthens the intellectual life but changes human potentiality into human actuality. The school process is **Humanizing Process** distinctly a humanizing process, because it extends beyond the domain of intellectual culture and trains the individual in the humanization of the race. Humanism is that science which softens, refines, civilizes and ameliorates the individual.

The educational process is not wholly developed through a study of academic text-books. It has a broader sweep of thought and includes a development of the social, æsthetical and ethical processes of human freedom. The school is a social institution and education is a socializing and humanizing process. The æsthetic process is humanistic, because it pictures and portrays the myriad conditions of human nature. The highest phase of the humanistic process is ethical or moral culture. The ultimate problem in education is the character-forming process.

Social Science.—Educational science, in recent years, has become largely a social science. The educational process is not wholly psychological but intensely sociological. It adjusts the individual not only to his intellectual studies but also to his social environments. The psychological process in education is a means to the development of the individual social consciousness. Mental development, *per se*, is not the final aim in education. The intellectual life must have a social factor and the individual must be trained in the social function. The social life of the school should grow out of the home and community life. The social life in which the child participates in the school has its origin in the social consciousness of the community. It is the purpose of the school to develop this stream of consciousness in such a manner that the child will live in an advanced stage of community life.

Education
Psychological
And
Sociological

Since the school is a social institution, it is necessary to understand the nature and meaning of society. In a course of lectures on "The Sociological Process," Dr. A. W. Small, a few years ago, arranged the principles of society as follows:

The Laws
Of Society

PRINCIPLES OF SOCIETY.

1. Society is composed of individuals and groups.
2. Society is a many of individuals.
3. Society is a process of perpetual compromises.
4. Society is a play of attractions between the many which make up its functions.

5. Society is a play of repulsions between persons making up its parts.

6. Society is a state of constant dependence of one part upon the other.

7. Society is a constant effort of persons who are separate in space and thought to approach and understand each other.

8. Society is a combination of persons each of whom is affected by the same conditions which influence all the rest.

9. Society is a process of socializing the individual members.

10. Society is the expression of the social consciousness of the members which compose it.

11. Society is a systematic sacrifice of members for members and parts for parts.

12. Society is a process of putting justice into practice.

These fundamental principles of social science explain the real nature of the social organism. The school is composed of individuals not isolated but in groups. The real nature of the school is the community life which affects the thought, actions and experience of the student body. The school is the individual "writ large" for the purpose of doing work. It is not the individual pupil, but the pupil in the class and the pupil in the grade that make up the school community.

The school has that inherent power, that subtle spiritual force which holds the organism together. Pupils studying a common subject and reciting a common lesson have certain sympathies and affinities for each other. One pupil supplements another and these two supplement the teacher. The social life of the school grows and develops in proportion to the strength and affinity found in the pupil and in the teacher.

The school is, however, not a sympathetic synthesis, but an unsympathetic antithesis of teacher and pupil. The social principle is developed by teacher jostling pupil and pupil jostling teacher. "Every point in every man's life is related to every point in every other man's life." The pupils are dependent upon the teacher and the teacher upon the pupils. As Colonel Francis W. Parker was wont to say:

"Every thing to help and nothing to hinder." "Responsibility."

The school is composed of "Many men of many minds." It is not thoroughly homogeneous but is made up of heterogeneous individuals of various and varied ability. The school is a process of combining, organizing, and getting individuals together for the purpose of psychological and sociological training and culture.

The school becomes an educational solidarity when teacher and pupils are so thoroughly organized into a compact body, by the power of spiritual energy, that each individual affects the social whole and the organism or school community trains the individual. When a pupil enters a school he is adjusted and socialized to his environments. He is made to march to the music of the social whole. The essential principle of the school and society in general is the fact that there exists between all human beings an affinity and relationship. Whatever relation affects one pupil affects also another and the teacher included. This principle of sociology emphasizes the fact that

Educational
Solidarity

the school is an organism and whatever disturbs one part of the school life affects all the others.

The Social Mind.—In a school of thirty pupils there are thirty-two minds; namely, thirty pupils, one teacher and one social mind. The social mind is the organized mind of all the pupils, about some principle of knowledge in which all the minds are thinking as one. In studying and reciting the Stamp Act all the minds of the class and the teacher are fused into an organic whole.

Focalized
Mental
Energy

This is the social mind which is the focalized mental energy upon the single idea or thought embodied in this historic event. The social consciousness is made up of the individual mind thinking common thoughts and expressing common ideas. The individual mind organizes ideas into a conceptual whole, as the social mind organizes the many ideas of many individuals into one social mind. Dr. A. W. Small says:

"The content of social consciousness, and of the processes that take place in individual minds as causes and effects of the prevailing state of social consciousness, is pivotal in sociological theory."

The school process now becomes a sociological process consisting of concessions and compromises. Herbert Spencer's principle is that:

"Every man is free to do what he wills, provided he infringes not the equal freedom of any other man."

Pupils are permitted to act as they choose, provided they act right and in harmony with the

spiritual nature of the school. Since the school is a social institution, the teacher must respect the rights of the pupils and pupils must respect the teacher. It is the law of any organism that the part serves the whole and that the whole exists in and through the parts. Justice

The principle of justice emphasizes the fact that the organic elements of the school—the teacher and the pupil—must be harmonized and socialized, adapted and adjusted to each other. For a school to increase in efficiency it must be the embodiment of the principle of justice, equality to all and special privilege to none.

Studies Socialized.—The centre for correlating is not history, science nor literature but the social and psychological activity of the child. The fundamental factors of social life are food, clothing and shelter. These should be made the centre out of which the school life should be evolved. History expresses the social life of the race, as it deals with social communities, social wholes and social situations. A clear analysis of the history process reveals the fact that it is a Social
Content
Of Studies sociological science. As science has grown out of race activities it is primarily a socializing factor. Nature study, the school-garden, the school-kitchen and the laboratory are helpful in the social development of the individual. These subjects are experimental and bring out what is best in the student by a process of mingling and intermingling of pupils during study period and the recitation. Language is not so much

an expression of thought as a medium of social communication. An individual thinks and in his desire to express his thoughts he creates language. In teaching beginners language, reading and spelling, the social factor plays an important part. Arithmetic should be evolved out of the home life. Number should be taught by thinking and measuring objects connected with the child's social activities—food, clothing and shelter. Denominate numbers can be most effectively taught by entering into the social life of the child. He enjoys these activities so intensely that he learns arithmetic incidentally. Art, manual training and music have also large social factors.

The recitation should be made a social clearing-house. A happy, joyous, social spirit should pervade the recitation period. The teacher should kindly assist the pupils, the pupils should pleasantly help the teacher and each should coöperate for the social welfare of all. In developing the thought found in the lesson the pupil is at the same time attuned to the music of the social order of the class.

The Social Centre.—The school should be made the social centre, the Hull House of the community. The socialism taught at this centre should be intellectual, spiritual and moral. The social life of the school will usually be the social life of the community plus some advanced principles of social reconstruction. To improve the social atmosphere of the school is to

Recitation

Socialism of
The School

inject new ideals into the community life in which it is located. Around the school should cluster all those forces which tend to place society upon a higher plane. Among these uplifting influences are lectures, the library, the night school, educational associations and social reforms.

The entire school-plant should be utilized for the purpose of disseminating knowledge, and injecting new ideals of life into the minds and hearts of the entire community. Out of this social centre should flow an irresistible stream of influences which shall submerge ignorance, superstition and degrading tendencies.

Social Ideals.—Colonel Parker defines the school as society shaping itself. He would have the school to be an ideal community in which every pupil is an ideal citizen. Ideals are absolutely necessary for the attainment of the highest good. Colonel Francis W. Parker says:

An Ideal

“An ideal determines every thing that enters into its realization.”

Education is a process of setting up ideals and by self-activity realizing them. It should be the purpose of the school to stimulate the pupil in such a manner that he will have no rest until he accomplishes the highest ideals attainable in life. Some one has said that idealistic philosophy aims to unfold the mental faculties, cultivate the heart, promote self-activity, plant the seeds of altruism, transform thought and sweeten life.

The school becomes a social ideal when the teacher has at heart the pupil's success in a degree equal to that of his own; when the pupil aids the teacher and assists his fellow pupils to the extent that he would look after his own welfare, and when each individual of the school system—the trustee, the teacher, the pupil, the county and state superintendent and the National Commissioner of Education—looks after the welfare of the social whole with as much zeal and interest as his own personal success in life.

The School
A Social
Ideal

The monadistic conception of the school makes each pupil independent of every other one. Each pupil is a monad, psychical in nature and exercising no influence. According to this doctrine society is an unnatural state of existence and individual instruction is better than class recitation. The monistic conception of the school makes every phase predetermined by the whole. It puts emphasis upon the unity of individual pupils and considers education a phase of social progress. The school process is monistic, having a unitary origin and aim, and teleological, because there is plan and purpose running through the entire organism.

Monadistic

Monistic

Organic

The organic conception of the school makes the relation between pupil and teacher an intrinsic one. A pupil has an individual existence, it is true, but his real life is in and through his social relation, to other individuals. In the

school there is an inherent relation existing between teacher and pupil and an inner end to be realized. The school develops from within and grows by internal adaptation of soul of pupil to soul of teacher. The end of the school brings it into existence, and forms its essential nature which is the freedom of the pupil. The school as an organism may be defined—"As a whole whose parts are intrinsically related to it, which develops from within, and has reference to an end that is involved in its own nature."

The social relationship cultivated in the school has its abiding essence in the organic nature of mankind. An individual does not exist in this world in and by himself, but is always found in and through a relation to other human beings. According to the organic social conception of the school a pupil never exists alone, Social
Basis but always in community life. It is the law of any organism if one part suffers the whole suffers. If a pupil breaks the spiritual thread of the school the whole school feels the breach of harmony. We are told that man by nature is a social being and that the individual is an abstraction, and that the true reality is humanity. The social atmosphere of the school enlarges this humanity and causes the individual to follow the still small voice of an ideal life, whispering truth, beauty and goodness.

Social Growth.—Education is a systematic process of training the growing mind plus an external

process of adjusting the individual to his natural and social surroundings. All social growth is conditioned upon the ideas, thoughts and customs of our social environment. The social forces which surround the pupil are as impressive and educative as the intellectual factors of the school. He would be as idiotic as Kaspar Hauser, without coming in contact with human society. The pupil is a spiritual being and must live, move and grow under the educative influence of human activities. The school, the class, the grade, the games and sports connected with school life are social forces which adjust the pupil to his proper sphere in the educational system. When a pupil first enters school he is required to act in harmony with the new social order as the psychological process begins. The sociological process must go hand in hand with the psychological. In connection with his mind culture he is socialized at the chapel, in the societies, in the class-room, and is made to feel he is a part of the social organism. His social growth is due to a process of adapting himself to the many complex relations found in the social whole of which he is a member. As his altruistic nature develops he gradually begins to look after the welfare of others in preference to himself.

Human Society
"Social progress is the continuous weakening of selfishness and the continuous strengthening of sympathy."

Science teaches that all progress in life, physical and social, lies in the fact that there is a constant

adjustment of equilibrium between the organism and its environments. John Fiske says:

"The advance from indefinite homogeneity to definite heterogeneity in structure and function is a leading characteristic of social progress."

He further says:

"In social development corporate life is more and more subordinated to individual life. The highest social life is that in which the units have the greatest possible freedom."

In his "Cosmic Philosophy" he states the law of social progress as follows: Social
Progress

"The Evolution of Society is a continuous establishment of psychical relations within the Community, in conformity to physical and psychical relations arising in the Environment; during which, both the Community and the Environment pass from a state of relatively indefinite, incoherent homogeneity to a state of relatively definite, coherent heterogeneity; and during which, the constituent Units of the Community become ever more distinctly individuated."

VIII.

THE ÆSTHETICAL

THE humanistic process socializes the individual, adjusts him to his environment and prepares him for that higher phase of human growth and activity known as the æsthetic process. The pupil becomes conscious of his humanity by studying the beautiful embodied in the world of art. The study of art is a humanizing process because it reflects and pictures human beings in varied and multiplied forms. The pupil realizes his true worth by incorporating into his nature the works of art which represent his other and better self. This otherness is spiritual, the ideal life to be attained, and the whole æsthetic process consists in transforming the original nature of the individual into a higher spiritual freedom.

The Beautiful School.—The school is beautiful when the spiritual forces move freely and are not in bondage to any energy found in the external organism. Any organism is beautiful when the inherent vital force triumphs over matter; when the creative energy produces an ideal tree, or work of art; and when for example the inner spiritual energy of the school governs and holds in subjection the outer objective conditions. A beautiful school is one in which the teacher, pupil and subject-matter are harmoniously related and artistically adjusted in their interaction. If

Organism
Beautiful

the mechanical, external, objective school limits the free activity of spirit, the school is not beautiful. To make the school æsthetical, the spiritual process must dominate over the external factors, and the machinery must respond to the inner heart-beat of the organism. The organic unity between the teacher and the pupil must be the power-house which holds within its grasp all the external mechanism and sends a ray of beauty into every activity of the school. The spiritual energy holding the school together is a form of the beautiful which develops an important element in the child's nature. The purpose of the æsthetic process in the school is to cause the ego to see itself, recreate itself and rethink itself. The spiritual mirrors itself in the subjective school and externalizes itself in the objective school. The school is the self-reflection of the ego in the form of human institutional life.

The beautiful is born in the soul; it is the inner self unfolding itself; it is in essence spiritual. The spiritual functioning, as the beautiful has
a fundamental scission within itself, sep- The
Beautiful
arates itself from itself internally and then externalizes itself. The beautiful is a sensible manifestation of the ideal which, according to Dr. J. S. Kedney, inhabits matter and constitutes its veritable essence. Hegel teaches that the beautiful is an immediate unity of the spiritual essence and an external form. It is the shining of an idea through a sensible medium; namely, a stone, a tone, color

or poetry. The artistic takes on the appearance of the sensible in which is permeated the spiritual.

The Process of Self-estrangement.—The educational process consists in mind estranging itself from itself and cancelling this estrangement, returning to itself enriched, realized and completed. Mind has the power of apprehending itself in its otherness and bringing back to itself what was once estranged. It is this active principle which lays hold on the spiritual in art and nature, and makes it a part of the soul's own being. The thinking mind identifies itself with its other self found in art and restores to itself this estrangement. It is the function of mind to maintain its identity in its particular manifestations. Mind becomes satisfied, attains its freedom when it permeates all its products and makes them its own.

Function
Of Mind

J. K. F. Rosenkranz makes:

"All culture must pass through these two stages—of estrangement and its removal."

This principle explains the school process, the educational process, the teaching process and the evolution of the human mind itself. Mind is first absorbed in the objective world; secondly, it permeates the world of art and nature and discovers that universal principle which it identifies as its other self. Mind recognizes in the beautiful a nature identical with itself and hence returns to itself. This self is reason, the essential element of both mind and the objective world.

Evolution
Of Mind

In the school, in art, in nature, the mind discovers its own essence, penetrates into its own being, identifies its own law in what seems to be an alien existence. The school as an æsthetic process emphasizes the fact that education is determined by mind producing itself in some objective form and realizing itself by removing the estrangement and returning to its self.

The Purpose of Art.—Keats poetically asserts:

“Beauty is truth, and truth is beauty, that is all you know on earth and need to know.”

According to Matthew Arnold—To see things in their beauty is to see things in their truth. Emerson expresses the same fact:

“Truth and goodness and beauty are but different faces of the same All.”

Goethe writes:

“Beauty is inexplicable, it is a hovering and glittering shadow, whose outline eludes the grasp of a definition.”

Lotze in his outline of Æsthetics defines the beautiful as—The appearance to an immediate intuition of a unity amongst those three powers (law, matter, idea) which our cognition is unable completely to unite. Plato said:

“The beautiful is the splendor of the true.”

Browning has truly written:

“We’re made so that we love
First when we see them painted, things we have passed
Perhaps a hundred times nor cared to see.”

Wordsworth in describing the beauty of the rainbow artistically declares:

"My heart leaps up when I behold
A rainbow in the sky:
So was it when my life began;
So is it now I am a man;
So be it when I shall grow old,
Or let me die!"

According to Thomas Huxley, The man who is all morality and intellect, although he may be good and even great, is, after all, only half a man. In the mass of mankind the æsthetical faculty like the reasoning power and the moral sense, needs to be roused, directed, and cultivated, and I know not why the development of that side of his nature through which man has access to a perennial spring of ennobling pleasure should be omitted from any comprehensive scheme of university education.

The purpose of art is to reveal to mankind all the possibilities slumbering within the human soul, to externalize the internal, to objectify the subjective, to carve the spirit in marble, to paint the soul on canvas, and to unveil the rhythmical spirit in song and verse. The aim of art is to express what is most profound in human nature, to liberate the richest intuitions of mind, and to soften, refine, purify, and ennoble the inner subjective man. Art portrays pains and pleasures, sentiments and sorrows, successes and failures. In art we see our selves objectified and our real self

compared with our ideal self. This has a tendency to lift us above the material possessions of this world into the realm of truth and righteousness.

It has been said that art is not borrowed, stolen nor invented, but comes only by evolution. It is a struggle for expression of a voice that will not be stilled and cannot be hushed. Robertson once said:

"What we want is not so much, not half so much light for the intellect as dew for the heart."

To live constantly in the presence of some masterpiece of art as the "Apollo Belvedere" or Raphael's "Transfiguration" is really dew laid upon the heart. One of the purposes of art is to still the storms of life and to keep us "In tune with the Infinite." The soul of the artist must be tuned to the celestial harmonies of the world for what he thinks, he portrays, and what he feels, he reveals in artistic form.

The Ideal in Art.—The idea or ideal in art is the absolute self-determined spirit, the efficient force of the world and the divine principle which realizes itself in the human soul. The nobleness, the excellence, the beauty in a work of art is a spiritual essence which manifests itself in the intellectual, moral and religious phases of mankind. These eternal principles are the essential characteristics of the human soul which externalize themselves in the social, æsthetical and ethical order of the school. What is truly beautiful, is ideal spirituality embodied in external form. It

Dew on
The Heart

Eternal
Principles

is not only poured into external form but returns from this outer manifestation into the inner consciousness of the individual. The beautiful springs out of the human soul and is rethought by the spectator or interpreter. In the æsthetic process, as in the school process, there are three essential elements: The creative human soul, the spiritual essence and the recipient mind.

The first is the artist, musician, poet, sculptor, thinker, the original energy, the generative force which calls into existence a new production. The creative human being externalizes himself in some outer form and transforms reality into ideality. We see it in Homer battling with the gods, Eads spanning the Mississippi, Raphael painting the Madonna, Gray writing the Elegy or Bartholdi creating the Statue of Liberty. In each there is a stamp of individuality coupled with the spiritual essence. This spiritual force compels the individual thinker to utter his ideal self and thereby creates the artist, the poet, seer and philosopher. The product uttered is a combination of intellect, feeling and will and hence is a humanizing factor in civilization. The third principle in the æsthetic process is the recipient mind, the spectator, reader, hearer, interpreter, who rethinks the art product and annuls the estrangement. The interpreter communes with the universal spirit by intuition, mediation and philosophical insight.

The æsthetic process may be summed up as follows: First, the genetic energy; second, the

object created and projected; and third, the recipient mind communing with the individual soul and catching a spark from the universal creating machinery. In studying any art production we begin with what is immediately presented and then seek to ascertain its meaning. The external appearance is not the essential factor in a work of art. The internal significance is what animates the outer form. The æsthetic process consists in the inner self unfolding itself into an outer manifestation which bears the universality and essentiality of the involved idea.

Classification of Art.—Art is classified upon the relation of the embodied ideal to the material in which it is represented. There are two world elements whose intermixture creates the various forms of art; namely, the individual and the universal, form and content, appearance and reality, existence and essence, phenomenon and noumenon, substance and activity, finite and infinite, expression and thought, matter and spirit, seen and unseen, real and ideal, object and creative energy.

In symbolic art matter predominates over mind. The spiritual is weighed down by the corporal. It becomes lost in the material, struggles to free itself, but cannot think itself aloof from the physical. Architecture with its "silent earnestness and oriental sublimity" is an example of symbolic art. It does not represent the idea perfectly, but only an adumbration of it, and has been called "frozen music and a petrified prayer."

Symbolic
Art

Symbolic art strives in vain to discover pure conceptions and merely paves the way for a more adequate presentation of the ideal. The following are examples of different types of architecture: The Library of Congress, Italian Renaissance; Parthenon, Doric; Athenian Acropolis, Ionic; Westminster Abbey, Gothic.

In classic art the spiritual and the material, the ideal and the real are presented in equal proportions. Spirit incarnates itself in stone and bronze and matter becomes merely a vehicle of thought. Praxiteles is said to have permeated the marble with the moods of his own soul. The human form is the most adequate expression of the embodiment of spirit, but sculpture cannot unveil the innermost powers of the human soul. It is the function of Romantic art to penetrate into the secret recesses of the human spirit and to portray the infinite possibilities of mind. In classic art there is a conflict between spirit and nature, the ideal and the real which tension is the law of the school and the law of the universe. Sculpture pictures most accurately the perfect harmony of the spiritual and sensuous, gives fixed forms and creates what are called eternal models. Egyptian sculpture symbolizes the spiritual struggling to free itself from the natural as seen in the sphinx. The ideal sculpture of the Greeks attained its highest conception in the forms of gods which represent universal characters, as Zeus, the father of the gods; Apollo, the leader of the muses, and Athena,

Classic
Art

the goddess of wisdom. The gods of classic art were seen in stone and wood, but did not exist in flesh and spirit. "As soon as reason had comprehended God as spirit, there appear other ideas, other sentiments, other demands which ancient art is incapable of satisfying, to which it cannot attain, which called, consequently, for a new art and a new poetry." This new form of art is known as Romantic or Christian. Eight examples of classic art are found in the rotunda of the Library of Congress which represent as many characteristics of civilized life and thought: religion, commerce, history, art, philosophy, poetry, law, science.

In romantic art (painting, music, poetry) mind and spirit predominate, matter and phenomena retire. Mind struggles above matter and represents the real life of the soul. Spirit frees itself from nature, retires into itself and finds its true inner harmony. Beauty of form is now superseded by beauty of spirit. We are now in the realm of Christian art in which the human soul lifts us upward toward God.

Painting expresses the innermost depths of the soul, its joys, sufferings and conflicts. It portrays the inner subjectivity of the spirit, the inner religious world and the scenes of nature and human life. Whatever may take place in the human heart or soul may become the subject in painting. Painting exhibits the inner essential nature of the soul as it pours forth its longings and yearnings into an outer beautiful form.

There are many paintings of intense educational significance in the Congressional Library: "Wisdom" is holding a tablet; "Understanding," a scroll; "Knowledge," a book; "Philosophy" assumes a reflective attitude. The five women symbolizing the five senses are unique: "Taste" is drinking from a shell; "Sight" is looking into a mirror; "Smell" is enjoying the fragrance of a rose; "Hearing" is listening to the murmuring shell; "Touch" is contemplating a butterfly. The sciences are represented by female figures of exquisite beauty and most interesting symbolism: "Zoology" is clad in the skins of animals; "Physics" holds a torchlight of investigation; "Mathematics" is illustrated by a nude figure representing "the naked truth"; "Geology" stands upon a mountain gathering specimens; "Archæology" is deciphering the record of an old book; "Botany" is standing upon a water lily analyzing its blossom; "Astronomy" stands upon the earth, with drapery representing the heavenly bodies; "Chemistry" is symbolized by the glass retort and hour-glass.

Poetry is the most spiritual form of romantic art. It is the artistic expression of spirit realizing its freedom and is no longer in touch with the sensuous world. The genetic principle of poetry is life itself, and illustrates the soul struggling to free itself from bondage. Poetry disturbs the ideal, loosens the bonds and creates within the individual a longing for spiritual free-

dom. The constructive energy of literature is the soul in constant stress to realize its true nature. Literature is a form of self-realization because it assists the individual in casting off his shell and attaining his true worth. It awakens within the individual a consciousness of his many limitations and idealizes before him a life worthy to be realized. The chief function of literature is to liberate the human soul and to assist it in gaining its inherent worth. Homer, Dante, Shakespeare and Goethe are four great literary writers who have portrayed in artistic form the inner creative activity of the human soul and as Aristotle says—"have to do with what is universal."

Music is a form of art which gives expression to the inward consciousness of the soul. It annihilates form and gives expression to the longings, yearnings and aspirations of the spirit within, and has been called spiritual existence Music put in motion. Music is spiritual because it is the soul that sings and inspires the listener as no other work of art. It is the function of music to assist in spiritual freedom by giving expression to the thrill of the soul in outer vibrations of tones and by contrasting the cold intellect with the joyous emotions. It awakens the innermost chords of life, expresses in sound the activity of spirit, sweetens the disposition, tempers the soul, fashions it according to the laws of rhythm and harmony, calms the emotions, liberates the soul, and transforms it into the realm of a purer and sweeter atmosphere.

The most progressive educators are recommending the master productions (the great symphonies, the oratorios, and operas) to be reproduced in school to develop the pupil's æsthetic nature. For students to hear, love and appreciate Beethoven's "Moonlight Sonata" is to be elevated to a higher life of beauty and to be tuned to the celestial harmonies of the world. To illustrate the profound significance of such a work of art upon the human soul, Dr. William T. Harris suggests the following interpretation: The "Moonlight Sonata" was written by Beethoven when he was recovering from a disappointment in life. The first movement is soft and floating and portrays the soul musing upon a memory which deeply affects it. The surrounding is dim, as seen in moonlight, and the soul is lit up by a reflected light at the memory of a past bliss. On account of this feeling of borrowed light the Sonata in C Sharp Minor has been called by Americans "The Moonlight Sonata." Sadly the soft gliding movement continues and more distant grows the prospect of experiencing again the remembered happiness. Only for a moment can the throbbing soul realize its dreams and the plaintive Minor changes to Major. At the remembrance of renunciation the soul is plunged into grief and despair, a sepulchral echo comes from the base and all is stilled.

In the next movement Beethoven realizes, "We must separate. Farewell." The musical phrase expressing this thought lingers in its striving to

shake off the grasp and get free. The hands will not let each other go. The phrase runs into the next and back to itself and will not be cut off. In the trio, there seems to be the echoing of sobs that comes from the depths of the soul as the sorrowful words are repeated. The buried past still comes back and holds up its happy hours while the shadows of the gloomy future hover before the two renunciations! This movement is very short and is followed by the *Finale*. "No grief of the soul can be conquered except through action," says Goethe, and Beethoven expresses the same sentiment, and in the third movement the soul is depicted in endeavoring to escape from itself and to cancel its individualism through contact with the real.

In the first movement of the Sonata, Beethoven's soul is involved with Julia. She does not reciprocate his devotion and her renunciation leaves his soul devoid of that universality that it would have obtained had she reciprocated his love. Hence the soul must find surcease of sorrow through action, through will or practical determination. How fiercely the soul rushed into the world of action in the *Finale*! Beethoven plunges through life, now and then overcoming sorrow and grief and now and then swooning beneath the weight of sorrow for his lost love. The lost chord of his devotion occasionally reverberates a minor tone through his soul, but he awakens from his dream and drowns his sorrow in action.

To study such a classical production and to listen to its music are of intense value to pupils and pedagogical students. They are given a true insight into the creative spirit of art productions and are enabled to appropriate unto themselves the universal principles of art creations. The aspiring pedagogical student should be familiar with at least the following great musical productions: Beethoven—Sonata Pathétique Op. 13; Variations in C Minor; Rondo in G Minor; Turkish March; Sonata Impassionata, Op. 57. Chopin—Sonata in B Flat Minor; Fantasia in F Minor. Handel—The Harmonious Blacksmith. Bach—Chromatic Fantasia and Fugue in D Minor. Haydn—Fantasia in C Minor. Mozart—Variations in F Major. Liszt—Rhapsodies. Wagner—Death of Love. Rubinstein—Valse Caprice. Mendelssohn—Songs without Words.

IX.

THE ETHICAL

THE ultimate purpose of the humanistic process of the school is to make the pupil ethical. In addition to the intellectual, social and æsthetical processes found in the school there is also a moralizing process into which the pupil must now be introduced. To develop character, to strengthen the individual moral nature, to tone up the child's ethical ideals, constitute the final purpose of the humanizing process of the school. To humanize is to soften, to make gentle, to refine, to civilize and to give character to individuality. The school must lead the child beyond the domain of the intellectual, beyond the realm of the social and æsthetical into the highest department of culture known as the ethical.

Moralising
Process

The Pupil Ethical.—The school now assumes its highest function of transforming the pupil's original nature into an ideal nature. Any educative process is moral—when it develops the human soul; when it stirs up the inner, subjective nature of the individual; when it gives the pupil an aspiration and ideal for higher life. It is truly an ethical process to teach a lesson in such a manner that the pupil can see in it his other self. To see in a history lesson his ideal self and to touch the spiritual chord in a poem is as much an ethical process as

Ethical Training to develop the will. Ethical training should stimulate the whole soul of the individual. To train a pupil in forming accurate judgments, to drill him upon the facts of science is ethical, because it gives the pupil an upward tendency in life. To demonstrate the Pythagorean theorem is as truly moral as to understand and realize the inner nature of history or to absorb the spiritual content of a poem. The joy of a lesson learned, of a proposition in geometry demonstrated, or of a syllogism of logic understood, affects the whole ethical nature of the pupil. Whatever touches the intellect, whatever arouses the will, whatever disturbs the emotional nature and whatever tones up the entire being, is an ethical act in teaching.

The Law of Ethics.—The ultimate law of ethics affirms that the self-active mind must not contradict itself and that no artificial stimulus is necessary to cause a pupil to study, to think, to learn. Dr. Arnold Tompkins asserts that when a pupil is studying for a prize, rather than for the thought in the lesson, he is practicing deceit with his own thought processes which is as immoral as to practice deceit with his neighbor. According to this great educational thinker it is entirely wrong to introduce per cents or an examination as a stimulus between the pupil and the subject studied for it is in direct opposition to the learning process. The mind learns by struggling directly with the thought of the subject and by bring-

**The Mind
Learns**

ing itself into a living relation with the thoughts and ideas of the lesson to be learned. The child through his own self-activity strives to attain the thought of the lesson; he is hungering and thirsting after the spirit of the universe. To interfere with this self-activity would place the pupil in a wrong attitude toward truth and would, therefore, be an immoral act.

The school is an educational institution for training the pupil into positive ethical relations. The institutional pupil is taught to see in his fellow pupil his ideal potential self and that he must subordinate his individual self to the larger life of the school. The true pupil loses his life in the school for the good of others and thereby realizes his true self, for—

Doctrine
Of School
And Life

"He that findeth his life shall lose it."

He must gradually be led to see that reason is the inherent principle of the school and the fundamental basis of his own nature. He attains spiritual freedom by adjusting his life to the inner life and thought of the school.

Altruism is a method of thought, a process of self-realization, a rule of action, a law of control and one of the deepest principles in human nature. As a law of life egoism comes before altruism, for a creature must live before it can act. However, altruism is just as essential, for a being cannot exist without depending upon others. Egoism and altruism are coessential, as living for others is a

process of living for self. The doctrine of the school should be founded upon the moral principle—“*Thou shalt love thy neighbor as thyself.*”

As a child must exist before it acts, egoism precedes altruism; otherwise there would be no self to help another. However, what one is physi-

Altruism
Versus
Egoism

cally, mentally and morally depends as much upon others (altruism) as upon self (egoism). All human conduct which grows out of attention wholly to self or wholly to others will certainly be deficient of an essential element. Self-sacrifice and self-preservation are inherent tendencies of life. It is nevertheless man's prerogative to live in and through beings other than himself. Altruism is said to be the name of a tendency and may be, therefore, physical, psychological or social. It is the intent and not the result that makes the deed altruistic. If for selfish purposes I do good to others, I am no less an egoist although I have made others happy. If my property is destroyed and I cannot pay my debts, I am no less an altruist although I cannot meet my obligations. It is, therefore, the intent which makes the act moral.

There is a constant conflict between egoism and altruism. It is the educator's imperative duty to ascertain which is the law of the school and which is the law of life. Kant would say:

“Nothing should be done which we could not see done universally.”

Schopenhauer claims that pity is the foundation for right conduct and affirms:

"In pity a man comes to a sense of the real oneness in essence of himself and his neighbor."

He implies that an individual directly recognizes in others his own, true, ideal self.

The school like the plant and animal has an inner law and life. The ideal perfection of its nature is a potentiality hidden within which realizes itself by its own self-productive activity. The school is not a blind force in contact with another blind force, but a deep struggle with reason and an immanent warfare within. It is a tension between the actual and the ideal, between what a pupil is and what he should become. It is the very essence of school as it is of mind itself to be divided against itself, to win its ideal freedom by an internal struggle. Man rises out of the life of nature, by means of a School, into a moral atmosphere; by means of the State, into civil freedom; by means of the Church, into a religious life.

School
Tension

The Moral Process.—That which makes one a moral being is a universal essence which transcends the particular. Thought and reason constitute the universal element of mankind; appetite and desire are the particular. Thought and reason are constantly at war with appetite and desire. The object of desire is the particular while the end of reason is boundless. It is reason and intelligence that make an individual moral. The pupil grows into a moral life by transforming his lower self into a higher one. There is a moral order in the school which must flow into

Individual
Versus
Universal

the pupil's life if he realizes the perfection of his being. The school attains moral perfection when the pupil loves and obeys others as he would himself. The individual and universal life are now unified and moral freedom attained. The child in school is so organically related with the moral atmosphere of the school that very soon he identifies himself with the moral life of the race. The pupil attains moral perfection when his universal nature controls and transforms his lower life. Dr. John Caird in working out this ethical doctrine defines morality as the identification of the individual with the universal life, the surrender of the private to the social self. He finds in the moral life the solution of the contradiction between the natural and the spiritual, the actual and the ideal, the individual and the universal nature of man.

In the school process the child has duties to himself, duties to pupils, and duties to God. These are not absolute distinct functions, for a duty to

Duties God involves a duty to self and others also. In fact these three forms of duties are interrelated and correlated. It is the pupil's duty to self to offer to the moral atmosphere of the school, a clean perfect body, to perform assigned tasks joyously and cheerfully, and to assist in elevating the moral tone of the school. The pupil must at all times obey the law of truth and integrity and live in harmony with the divine idea. The test of a pupil's moral nature, however, lies in his relationship with his fellow pupils. He must

not only live in accordance with the moral ideal but he must assist others in growing and developing into the highest ideals known to human beings.

As the ethical process is so important in the thought and structure of the school, it is necessary to make a brief study of the origin and nature of the ethical concept. The origin of the ethical idea is one with the origin of knowledge itself.

Origin of
Ethical
Concept

There are four schools of ethical thought, the intuitional, the transcendental, the utilitarian and the evolutionary which discuss the ethical consciousness. According to the first and second schools, ethical ideas are intuitive; according to the third and fourth, empirical.

The intuitional school regards the ethical concept innate, a matter of pure intellection or a faculty of sensing the right as one would an apple blossom. Modern intuitionalism combines the intellectual and emotional element and makes Intuitionism conscience a synthesis of these two factors. According to this doctrine there is slumbering within the principle of oughtness. Kant's categorical imperative is the corner-stone of the intuitional school. There spontaneously arises within the soul an obligation to do or not to do a thing to which reason makes no appeal. It is claimed by the advocates of this doctrine that the ethical consciousness is universal and, therefore, possessed by all persons. It is "the moral law within" that guides and experience is not necessary to teach us ethical ideas.

According to the transcendental theory, moral consciousness is a phase of the eternal reason found in and through all things. Transcendentalism teaches that the world, man, nature, history, science, art, religion and all being are manifestations of the eternal consciousness. That conduct is best which most perfectly mirrors the mind of the Supreme Being, the creative and sustaining power of all that is. It is the duty and privilege of each person in the world to realize his possibilities, and try to transform his real into his ideal attainment. The ethical axiom of this school is, "Be a person, and respect others as persons." This doctrine is usually stated as the law of self-realization.

Each pupil in developing his own personality should assist every other pupil because each individual consciousness is related to that eternal consciousness which is the source of all life and thought. There is within the school a social solidarity and also an ethical solidarity of pupils based upon the profound principle of the unity of mankind.

The utilitarian doctrine discusses the good rather than the right, and regards ethical ideas as a result of experience. According to one thinker conduct should be regulated and harmonized with the pleasures of the sensibilities and according to another the pleasures should be refined and guided by prudence. Pleasure must result in conduct which is conducive to the greatest happiness.

ness to the greatest number. These pleasures are intellectual and moral and lead to the development of the total single self.

The theory of evolution teaches that conduct is due not to individual but to race experience. As every act is designed to fulfill a certain end in life, the ethical concept is the result of a long series of evolutionary changes. Society ^{Evolutionism} is an organism made up of many individual cells and the healthy condition of the whole depends upon the ideal condition of each person making up the organism. The bond of union of the evolutionist is organized human life, while that of the transcendentalist is spiritual unity. According to the former—"We are born not into a chaotic crowd, but into an organized army, and we must learn to keep step and rank and to obey orders." According to the latter—"The ethical ideal is a will to know what is true, to make what is beautiful."

An Ethical Organism.—Whatever may be the origin and nature of the ethical concept, the school is a moral institution and has for its final purpose the training of pupils into a positive ethical life. The individual pupil realizes his highest type of moral perfection in the social whole and attains moral worth only in mingling with his fellows in the school community. The true pupil is the rational pupil made so in the school as an organic whole. The rational order of the school flows into the life of the pupil and creates within him a desire to live in the highest good.

The ultimate aim of the school process is to transform the potential spiritual pupil into an actual idealized oughtness. Besides intellectual, social and æsthetic culture the school's highest function is to develop the individual's moral consciousness.

Morality Morality is not what a pupil is, what he might be, what he could be,—but, what he ought to be. This *ought-to-be* is not merely a *wish-to-be* but a determination to accomplish something worthy of the highest ideal in life. It is not what an individual is that is essential, but what he hopes to become that determines his aim in life. A natural law is a law that is, but a moral law is a law that ought to be. The categorical imperative means that we must do what is right when we know what is right and the ancient thinker is correct in asserting that knowledge is virtue. As there are certain categories in the intellectual life which belong to all human beings, so are there certain universal moral principles which guide human conduct.

The ethical organism looks after the conduct and happiness of pupils and trains them to live in harmony with the ideals of life. It sets up a moral standard and inculcates moral principles.

Moral Standard The moral life of a school should be the moral life of a community plus a high standard of perfection to be realized in the educational process. Pupils should be lifted up into a higher life of moral responsibility and made to live in conformity with the highest types of human progress. Each lesson

and each recitation should make the pupil ethical through intellectual facts, through volitional training and through emotional aspirations. The pupil becomes moral by living in and through the ethical organism which administers to the pupil's highest aspirations of life.

School Ethics.—The school interprets and applies ethical ideas in a manner peculiar to its nature and function. The teacher must understand the motive and intention of a pupil and govern him through a knowledge of his habits, character and former conduct. School duties must be regulated in such a way as to create school happiness.

No school is successfully taught that does not make the children happy and that does not send a thrill of joy through each. Happiness ethics is school ethics, and the greatest happiness to the greatest number is a pedagogical maxim worthy of consideration.

"Politeness is to do and say the kindest thing in the kindest way," and is one of the deepest principles of the school because it recognizes in other pupils the ideal potential self. True politeness in school recognizes the worth of each individual pupil and seeks to help others to become ideal in character. The teacher must be polite to pupils, pupils must be polite to the teacher and fellow pupils and each recognize in the other an organic part of the school whole. Order is not only the first law of heaven, but the first requisite of a successful

Happiness

Politeness

Order

school. School discipline should not come from without, but from within, in the teaching process. To teach to govern is a better law than to govern to teach. Good government can be secured only by loving the profession, and having an interest in the subjects taught and the children to be educated.

Truthfulness Truthfulness is one of the essential school virtues as it cements and binds teacher and pupil together into one organic unity of thought and action. For a pupil to practice deceit in school is paving the way to practice deceit in business, in politics, in the professions and in all the vocations of life. The pupil must be taught obedience

Obedience to the law of the school and thereby obedience to the teacher. In obeying the inner nature of the school the pupil is obeying himself for the school is an expression of the pupil's better self. The teacher must set forth the doctrine that self-sacrifice is the law of self-realization and that pupils must be taught to sacrifice their own pleasures in the school for the happiness of others.

Self-Sacrifice One of the chief school virtues is honesty of purpose in the daily work. Honesty in the preparation of work is as good policy in the school as it is in life.

Industry is one of the chief school virtues while idleness and inattention are disorganizing factors in every recitation. A good school is one in which each pupil is actively engaged in some form of work and one in which the incentive to work is found in the subjects taught and not

in some external matter. The teacher who inspires the pupil to work for the work's sake and not for per cents or prizes has attained a maximum of skill in his profession. The teacher who has the ability to inspire the pupil to long for truth and righteousness and to have no peace but in the pursuit of them has attained a high standard in the profession of teaching.

The pupil must be taught self-respect, self-control, and self-restraint. He is an element of the social and ethical organism and must deny himself pleasures and happiness, for the sake of others. Justice prevents pupils from infringing upon the rights of others and is a universal form of morality, because, it prefers the general good to individual happiness. In every recitation each pupil must respect the rights of others and subordinate his own desires and wishes for the good of others. Egoism and altruism are ultimate ethical principles and express the rational order of the school. These coessential principles and rational freedom have been discussed in a previous chapter.

Self-realization is the aim in ethics and education. The end of life must be a development in character—perfection rather than happiness. The true self can be realized only by sacrificing the lower self. The final problem in ethics and the ultimate aim in education must be tested in terms of the realization of the rational self. The supreme law of every educational process is

Self-
Control

Justice

Self-
Realization

to make the best of self possible. The pupil is to develop his own personality to the fullest extent and in doing so he is to assist in the development of other personalities associated with him. The duty to self and duty to others are coördinated by the profound world principle that each individual pupil is a part of the eternal consciousness and that pupils are fellows by virtue of a common relation to the Infinite Mind.

The Moral Life.—All educators agree that the end and aim of the educational process is moral culture. Teachers are not satisfied with facts learned, the taste cultivated, and the
Moral Culture intelligence trained, but seek to develop the pupil into a noble character. A pupil may have a keen and discriminating perception, a memory stored with the fundamental truths of nature and human nature, a clean, cold, logical intellect, but if the moral life has not been strengthened, the highest ideal of the school has not been attained. To realize moral perfection, the inner spiritual life of the child must be attuned to the moral order of the world, the heart must be made to beat in unison with divine harmonies and the soul made to respond to the noblest ideals of human growth, human culture and human freedom.

Whatever sharpens the intellect, whatever arouses the emotion and whatever develops the volitional nature, increases the moral capacity and gives stamina to moral character. While every well-regulated school enlarges the moral life, while all

good teaching is ethical, and while any subject taught in a correct manner affects the moral worth of the individual, literature is especially valuable to help the pupil form high ideals of life. We know what we are, but literature teaches us what we ought to be, and the strongest impulse to improvement is to become dissatisfied with our present, real self in comparison with the future ideal self. The ideal self is not an *ignis fatuus*, but the soul's consciousness of its possibilities through a determined choice and a preserving activity. The
Ideal Self Ideals in literature elevate the soul, animate and thrill us with a desire to know truth and to act it in our daily lives. By means of poetic inspiration, the student is made to feel the beauty, truth and pathos of physical nature, and human life is given an insight and yearning for the divine ideal. He is saturated with things that are true, things that are honest, things that are just, things that are pure, and made to think on these things that are the flower and fruit of human freedom.

To teach "Crossing the Bar" in a manner to touch the inner life of the pupil is not to chop it up into preparation, presentation and application and the rest, but to inspire the pupil with the faith, hope and love of the production. The pupil must realize that the star, bar, sea, twilight, bell, are symbols of a higher life that fill and thrill the soul.

The moral life is not the full and complete life, but it is the necessary approach to the religious

life. According to Dr. Edward Caird, man by the very constitution of his mind has three ways of thinking open to him. He can look *outwards* upon the world around him; he can look *inwards* upon the self within him; he can look *upwards* to the God above him, to the Being who unites the outward and inward worlds and who manifests Himself in both. The child spontaneously throws his mind into the outer world and exercises his senses; he then examines the inner self and develops the reason; and finally he synthesizes the inner and outer through a faith in a Divine Unity. The intellectual life should grow into the moral life and the moral life should find its fruition in the religious consciousness.

Our conscious life is made up of three ideas, the idea of the self, the idea of the not-self and the idea of the unity which is presupposed in the difference of the self and the not-self or the idea of God. The object and the subject are merged into an absolute principle of unity which binds all thinking beings and all objects of thought into one organic system of knowledge. The idea of God is the ultimate principle of our life and "Every rational being as such is a religious being." Caird teaches that the germ of the idea of God as the ultimate unity of being and knowing, subject and object, must some way be present in every rational consciousness, for such a consciousness necessarily involves the idea of the self and the not-self, the ego and the world, as

distinct, yet in relation, that is, as opposed within a unity. The clear reflective consciousness of the object without, of the subject within, and of God as the absolute reality which is beyond and beneath both—as one complete consciousness in which each of these terms is clearly distinguished and definitely related to the others—is, in the nature of the case, a late acquisition of man's spirit, and one that comes to him only as a result of a long process of development. In religion, Caird further says:

“Man beholds his own existence in a transfigured reflection, in which all the divisions, all the crude lights and shadows of the world, are softened into eternal peace under the beams of a spiritual sun. It is in this native land of the spirit that the waters of oblivion flow; for here the darkness of life becomes a transparent dream-image, through which the light of eternity shines in upon us.”

THE TEACHING PROCESS

THE GROWTH PROCESS

X.

THE MOVEMENT

TEACHING is a process of unfolding the spiritual life of the pupil and causes him to think, to study, to learn and to unify himself with the objective world. It is a spiritual movement below the material, a mental process beneath the physical, a soul activity underlying the mechanical means. Teaching is a process of knowing the object by bringing it into unity with the subject, and knowing the subject by causing it to be realized in the object. It fuses the mind of the pupil with the mind of the teacher through the thought of the lesson. Emerson in the "Spiritual Laws" affirms:

"There is no teaching until the pupil is brought into the same state in which you are; a transfusion takes place, he is you and you are he; then there is teaching."

Mind Movement.—The movement of the mind in teaching is vitally related to the movement of the mind in learning. Whatever may be the thought, feeling, volition and upward tendency of life in the teacher will become transfused into the life of the pupil in and through the process of teaching. The receptive nature of the pupil takes on to itself,

consciously or unconsciously, the intellectual, social, æsthetical and moral status of the teacher. Teaching is an organic process of unifying mind internal in teacher and in pupil, with mind external in the lesson studied. Before the pupil can obtain any knowledge or experience the same must be a living principle in the soul of the teacher. If the teacher is to cause the pupil to think the form, size, and beauty of the human eye, he must first think these relations himself, before they can be transmuted into the mind and life of the pupil. The movement in the pupil's mind harmonizes with the mind of the teacher and takes on to itself such emotional coloring, thought-relations and volitional tendencies as are found in the life of the teacher.

The Mind
Learning

The teacher transplants into the life of the pupil his own cultured self, builds into the soul of the pupil a perfect thought structure and thereby inspires him to realize the highest destiny of his being. No one can arouse what is best, truest and noblest in human nature who has not a deep, full, rich emotional temperament and a well-rounded life. The artistic teacher has the ability to build into the mind of the pupil a mental structure organically related to the thought and spirit of the world. He is charged with personal magnetism, imbued with the spirit of his profession and has the ability to electrify the pupil and to disturb his mental equilibrium as the magnet attracts and disturbs substances within the magnetic field.

The
Artistic
Teacher

The movement in teaching differs from the movement of mind in learning, yet at the same time the two processes fuse and intermingle. While the pupil is thinking the thought of the lesson the teacher is thinking the pupil's process of thinking. The pupil's mind is directed toward the lesson, while at the same time the teacher's mind is fixed upon the peculiar activity through which the pupil's mind must pass to gain the knowledge desired. Within the inner chamber of the soul of the pupil the teacher watches the mystic movements of the spiritual forces gathering in new knowledge and growing and developing in and through spirit objective to itself. The true teacher understands not only this subtle movement of the mind of the child, but also the logical order of knowledge to be learned. By means of questions, directions and illustrations, and concrete material he has the happy faculty of uniting the child with the subject taught in the bond of intellectual life, growth and development.

The Psychology of Subjects.—The psychology that the teacher needs is not child psychology, genetic psychology, physiological psychology, experimental psychology, abnormal psychology, race psychology and animal psychology, but *primarily* the psychology of the subjects to be taught. By means of academic knowledge the teacher understands subjects, but by means of professional knowledge he gains ability to teach them. The professional study of a subject resolves

it into the mental processes constituting it and explains the method of presenting these ideas and thoughts to the growing mind. Professionalism means such a study of a subject that will clearly indicate the process by which the mind creates it and by which the mind learns the facts created and analyzed.

To be able to teach geography the teacher must know not only the subject as such, but must have a thorough knowledge of the organizing principle of the subject. He must by careful analysis and synthesis know the mental activities to be stimulated in teaching the subject and be familiar with the unitary principle around which the subject is organized. Before the teacher engages in the actual concrete process of teaching he must have a knowledge of the psychology of geography, the psychology of reading, the psychology of history and the psychology of all other subjects he proposes to teach. To be able to resolve each branch of study into its mental processes is the fundamental basis for scientific teaching. The mental activities found in reading, the mind's way of knowing and thinking the printed page, the faculties stimulated in the process, these and these alone are the absolute fundamental principles necessary in the correct teaching of reading. The psychology of a subject is not something external to it; it is nothing more than the mental acts which the mind takes in grasping it; it involves the thinking activity in learning it.

Mental
Processes
Of Subjects

The objective method which creates the subject is not invented and then applied to the subject, but is discovered in and through a knowledge of the subject itself. This professional study of a subject involves a comprehension of the organizing principle in the subject, a thorough knowledge of the central factor of mental life and a delicate adjustment of the law in the mind to the fact in the thing. In teaching botany it is necessary to see the relations in plant life that have corresponding relations in mind activity, and to understand how the mind grows in tracing the thought in the vegetable world. The psychology of the subject states the mental laws creating the subject and the mind processes which the subject stimulates and nourishes. It traces out the concrete process of thinking a subject and analyzes the processes by which the mind constructs the subject. It is a method of exploring the innermost constitution of a subject and can be attained by thinking the mind to be taught into unity of the subject by which it is taught to the end of growth. Such a knowledge of a subject gives new significance of it, and creates within the teacher an inspiration and a new insight into the teaching process.

Educational Values.—A study of the psychology of subjects logically leads to a discussion of their relative educational values. That subject has the greatest educational value which aids the pupil in grasping the widest range of thought and which most easily

The
Organising
Principle

The
Greatest
Educational
Value

and completely helps him realize his true self. While all subjects have a knowledge value, a disciplinary value, a practical value and a cultural value, "That branch of study which arouses most fully the activity of the student is the one that is most educative to him." Knowledge is a process of gaining new facts, ideas, thoughts, truths, principles and laws. Discipline is the increased mind capacity resulting from knowledge and represents the added increment of mind power due to the acquisition of knowledge. The practical and cultural values may be easily harmonized, for whatever develops the human soul furthers life's interest.

To understand the educational value of a subject requires a thorough knowledge of the organizing principle which creates the subject and which develops it into its divisions and sub-divisions. There is a certain mind activity which constitutes subject-matter and which stimulates and nourishes to growth in proportion to the fundamental thought embodied. To get an idea of the educational value of reading, grammar, arithmetic, and other subjects it is necessary to resolve them into the mind processes which they develop and enlarge.

The artistic teacher adjusts the mind Mind
Processes processes in the subjects to corresponding mind activities in the learner and that subject has the greatest educational value which assists the mind in the most natural way to realize its ideal and essential nature.

It is time wasted to discuss the relative educational value of grammar and arithmetic or history and geography for the comparative worth of each must be estimated in terms of spiritual freedom of the pupil. One subject develops one mind capacity and another enlarges the life in another direction, but both are essential to the evolution of the self. It is possible that one individual may realize his highest ideal through literature and another through science and the different branches of study are necessary for a well-rounded and full-orbed life.

The Growth Movement.—The movement of the mind in teaching and learning is a growth process which merges gradually into a thought process and finally ends in a true life process. Dr. Arnold Tompkins explains this process by saying:

“The teacher must think the mind that is taught into unity with the subject by which it is taught; or, the subject to be taught into unity with the mind to which it is taught.”

This movement strengthens the pupil's intellectual capacity, stimulates the social, æsthetical and ethical nature and fills the whole being with upward tendencies and aspirations in life. This growth process is most beautifully illustrated in studying the different movements of mind in teaching and reciting a reading lesson.

First Movement in Reading.—That movement which prepares the child to read is constructive

and reconstructive rather than interpretative. This movement does not harmonize with the alphabetic, phonic, phonetic, Pollard, Ward, motor, sentence, group nor object method, but uses that which is closest to the child's life and which I call the social thought method.

The means used in this method are plants, animals, fruit, flowers, a bird's nest, science in general, pictures, stories and myths. The mental steps in reading are: First, Thinking; second, Talking; third, Writing; fourth, Reading. Processes

The child is made to *think* through interest in the external stimulus. By means of his social surroundings he is led to *talk* freely. Through interest in the means presented and through the power of imitation, he pours out his energy in his attempt to *write*. He *reads* the sentences filled with the warmth of his own thought as spontaneously and beautifully as he thinks them or talks them.

In the first preparatory stage of reading the child goes from interesting thought to outward form. His thinking and talking are gradually merged into writing and reading. The following recitation is based upon an Thought
To Form
apple by pupils who have just entered school: The apple. The apple is green. The apple is red. The apple has a stem. The apple has seed. The apple is round. The apple has a core. The apple is hard. The apple has a skin. By thinking the apple, the child externalizes his thoughts and

creates oral sentences. Through imitation and interest the child struggles to write these and lastly reads his own thoughts embodied in his own language as naturally as he talks them.

A lesson on a bird's nest: A nest. The nest has a cord. The nest has hay. The nest has lace. The nest has mud. The nest has straw. The nest is round. The nest has weeds. The straw is fine. The nest has cloth. These ten sentences represent ten thoughts of ten different pupils. While the interest is at the highest pitch the teacher rushes to the board and writes the child's thoughts. In the intensity of his interest and through the power of imitation the pupils copy these forms (sentences) and read them out of the fulness of their own minds. The preliminary process in reading is thinking thought, creating thought and expressing thought. The movement of the mind in beginning to read is from content to form. After the child thinks, talks and writes he is naturally and easily led to read his own language.

The first movement in reading gives the child the language habit, assists him in translating his ideas into sensible forms and drills him in the power of conversation and in muscular coördination in writing and paves the way to the real reading act. These preliminary lessons should open the child's mind to the many objects of interest and gives him fluency of speech. It takes about eighty-five per cent of the

Interest and
Imitation

The
Language
Habit

child's energy to write the sentences which the other fifteen per cent expresses so easily. It is pedagogically wrong to begin with the form, for the initial stage in reading must necessarily be the child's own thought. William James makes:

"Every acquired reaction a complication grafted on a native reaction, or a substitute for a native reaction."

The native reaction is the child's own interesting thought and the acquired reaction is the formal sentence uninteresting in itself, but intensely valuable when it contains his own thought.

In a recitation in Dr. John Dewey's Experimental School, the children built a doll house consisting of two rooms, three windows, and two doors. It was built of brick and was attractive and inspiring. The social nature of the child, coming in contact with playmates and teacher, bursts forth into language through the power of intrinsic thought.

Dr. Dewey's
School

The child thinks about the house, talks to his associates, and by energy of mind gushingly writes his thoughts on the black-board. Lastly, he reads his own composition in a most interesting and inspiring manner.

The child sees a squirrel in a cage, a bird in a tree, a fish in the water, an animal in a museum and is led through the intensity of his thought to express himself in language.

The Child's
Language

He first reads his own language, and is gradually led to read and appreciate the composition of

others. There should be from thirty to fifty lessons based upon the child's own language before he attempts to read and interpret the language of some one else.

Second Movement in Reading.—The second stage or movement in reading is the interpretation of the thought found in the language written by some one else. The mental movement is from some concrete idea, through form to thought. This movement is the reverse of the first process. After a few simple lessons of this nature, suppose the child makes a study of—

"THE OWL.

"The owl sat in a hollow tree,
And cried the whole day through,
'I can not see, the sun blinds me.
Ah! what am I to do?"

"When night was dark the owl looked out,
And thought he'd leave his house.
For 'light,' said he, 'has come to me,
I'll go and catch a mouse.'

"The mouse he caught and then he cried,
'What next am I to do?
The woods shall ring, I'll sit and sing,
Too whit! Too whit!! Too whoo!!!'"

Before the pupil reads this lesson, he must be made familiar with its content. By means of a mounted owl the child becomes intensely interested in this lesson. The owl is examined, and the following points noted: The eyes, claws, wings and bill. The child's attention is

The Object

called to the hollow tree, the sun, night, his house, light, mouse, woods, "too whit" and "too whoo." Every idea in the poem should be presented to the pupil in a concrete manner. After he has become interested in the content, thought or meaning in a general way, he is ready to read. Having become interested in the study of the owl, the pupil now reads the poem and interprets the meaning in a happy, interesting and joyous manner.

Third Movement in Reading.—After the pupil has had about fifty lessons in prose and poetry based upon concrete life, he is ready to take the third step in reading. The mental movement is now to interpret through the Form to
Content form the abstract ideas of the production. The mind passes through the realm of the concrete into that of abstract thought. The poem or prose production must be read by imaging the meaning back of the word. The sentence, the paragraph, the verse, and the stanza should be read and interpreted from the abstract standpoint.

Dr. Arnold Tompkins in his *Literary Interpretations* gives such a fine analysis of this third movement in reading that I quote and give in substance his interpretation of the three types of poems. In his first type there is a constant stress, or tension, between two opposing forces. This tension is the inner heart of the poem, and gives the key to its interpretation. Perhaps the best example of this type of poems is Longfellow's—

"THE RAINY DAY.

"The day is cold, and dark, and dreary;
 It rains, and the wind is never weary;
 The vine still clings to the mouldering wall,
 But at every gust the dead leaves fall,
 And the day is dark and dreary.

"My life is cold, and dark, and dreary;
 It rains, and the wind is never weary;
 My thoughts still cling to the mouldering Past,
 But the hopes of youth fall thick in the blast,
 And the days are dark and dreary.

"Be still, sad heart! and cease repining;
 Behind the clouds is the sun still shining;
 Thy fate is the common fate of all,
 Into each life some rain must fall,
 Some days must be dark and dreary."

In this poem there is a struggle between two phases of life, sadness and cheerfulness. The polarity found in this poem is a philosophical principle which reaches deep down into the structure of the universe. We are taught that the world itself is nothing more than an energy struggling between potentiality and actuality. In the third movement in reading the pupil is ushered into the realm of subjectivity. He is given an insight into the structure of mind itself. The life principle, the imagery, the rhyme, the rhythm and the figures of speech are all created by a struggle between two opposing forces. The poem portrays life's struggles and awakens within the reader the consciousness of its own freedom. Its function and purpose is to liberate the individual from his bondage.

World
 Dualism

The polarity in a poem is the life principle which creates it. In "The Psalm of Life," it is success and failure; "The Two Voices," life and death; "Day is Done," rest and care; "Reaper and Flowers," life and death; "Light of Stars," pain and strength; "Hymn to Night," care and repose; "Footsteps of Angels," sadness and cheerfulness; "Flowers," death and resurrection; "Goblet of Life," bitterness and strength; "The Bridge," sadness and cheerfulness; "Courtship of Miles Standish," duty and desire; "To the Daisy," joy and sorrow; "The Merchant of Venice," love and hate.

Poetical
Polarity

Denton J. Snider has shown that Homer's "Iliad" consists of a series of dualisms and reconciliations. The genetic principle is a conflict or scission which ends in a harmony. The first movement in the Iliad is a struggle between the Orient, represented by the Trojans, and the Occident, by the Greeks. There is also a scission between the human and the divine, between the lower and the upper world and between the gods and men. Within the Greek camp there is a scission between Agamemnon and Achilles, and among the Trojans, between Paris and Hector. In the upper world there is a scission between Zeus and the lower gods, between his infinite and finite power and among the inferior gods between Venus, Mars and Apollo, representing the Trojan partisans, and Juno, Minerva and Neptune representing the Greeks. These dualisms form the creative energy

Homer's
"Iliad"

of the Epic. They are re-echoed in the inner heart-beat of the universe. In literature, as in the world each struggle is reconciled and harmonized into a higher form of life. Each literary heart-beat indicates a higher growth in life and a further advance in human freedom. The world, the poem and life itself consist of a series of struggles between what is and what ought to be.

Second
Type

The second type of poems is an illustration of the true nature of the teaching process. In these the movement is indicated in the following literary quotations:

"My heart leaps up when I behold a rainbow in the sky."

—WORDSWORTH.

"That even in savage bosoms there are longings, yearnings, strivings for the good they comprehend not."

—LONGFELLOW.

"The thing we long for, that we are."

—LOWELL.

"What I aspired to be and was not, comforts me."

—BROWNING.

"Higher still and higher."

—SHELLEY.

These gems represent the true upward life movement. The poet tells us that all animal and vegetable life is "upward turning." One of the best poems to illustrate this upward movement of human life and thought, is Bryant's—

"TO A WATERFOWL.

"Whither, amidst falling dew,
While glow the heavens with the last steps of day,
Far, through their rosy depths dost thou pursue
Thy solitary way?

"Vainly the fowler's eye
Might mark the distant flight to do thee wrong,
As, darkly painted on the crimson sky,
Thy figure floats along.

"Seek'st thou the plashy brink
Of weedy lake or marge of river wide
Or where the rocking billows rise and sink
On the chafed ocean side?

"There is a Power whose care
Teaches thy way along that pathless coast,—
The desert and illimitable air,—
Lone wandering, but not lost.

"All day thy wings have fanned,
At that far height, the cold, thin atmosphere,
Yet stoop not, weary, to the welcome land,
Though the dark night is near.

"And soon thy toil shall end;
Soon shalt thou find a summer home, and rest
And scream among thy fellows; reeds shall bend
Soon o'er thy sheltered nest.

"Thou'rt gone, the abyss of heaven
Hath swallowed up thy form; yet, on my heart
Deeply hath sunk the lesson thou hast given,
And shall not soon depart.

"He who, from zone to zone,
Guides through the boundless sky thy certain flight
In the long way I must tread alone
Will lead my steps aright."

The mental movement in this poem is onward and upward, following the physical movement of the Waterfowl. In the interpretation of a poem the mind first searches out the individual or object described in the poem, and secondly, conceives the universal, ideal meaning taught in the production.

Individual
And
Universal

The purpose of a poem is to teach some universal, fundamental principle of life, through the medium of some individual object. The poetic process is that movement of mind which universalizes some individual thing. The problem in the interpretation of a poem, is to analyze clearly the individual and note the distinctions of the fundamental ideas embodied in the universal truth. The following analysis of this poem will indicate a method of interpreting many literary selections.

THE INDIVIDUAL.

1. The waterfowl.
2. The solitary way.
3. The fowler's eye.
4. From zone to zone.
5. The illimitable air.
6. The bird has no doubts
nor fears.
7. The waterfowl has freedom.
8. The waterfowl realizes its
freedom.

THE UNIVERSAL.

1. Faith and Divine Providence.
2. The soul arising above
disappointments.
3. The soul rallying through
faith.
4. No visible guiding power.
5. A lack of faith.
6. Bryant has doubts and
fears.
7. Bryant is in bondage.
8. Bryant rejoices in the
water-fowl's freedom.

Such a study is not grammatical, rhetorical, philological, nor a literary and critical analysis in the ordinary sense of the word. It is an attempt to enter Bryant's "workshop and follow the generative thought as it bursts into reality and thrills and throbs into harmonious utterance."

The third type of poems represent the downward movement of life and thought. It pictures human

life in bondage to grief, despair and despondency. This type leads us into the dismal paths of life and illustrates the bewailing and bemoaning experiences of human life. It portrays that gloomy mood of the soul in "The Slough of Despond." It is a saddened picture in which "My heart is bewailing and tolling within me like a funeral bell." Perhaps the best representation of this type in the English language is Tennyson's—

Third
Type

"BREAK, BREAK, BREAK.

"Break, break, break,
On thy cold gray stones, O Sea!
And I would that my tongue could utter
The thoughts that arise in me.

"O well for the fisherman's boy,
That he shouts with his sister at play!
O well for the sailor lad,
That he sings in his boat on the bay!

"And the stately ships go on
To their haven under the hill;
But O for the touch of a vanish'd hand,
And the sound of a voice that is still!

"Break, break, break,
At the foot of thy crags, O Sea!
But the tender grace of a day that is dead
Will never come back to me."

In this type of poems of which Longfellow's "Afternoon in February" is another example, the soul of the reader is plunged into the depths of grief, sorrow, and sadness. A poem usually liberates the soul from some form of bondage, but in this selection each stanza increases the intensity

of the sadness. At each thought and stroke of the poet, the bondage is idealized, strengthened and intensified. As the poet gradually enters the abysmal shades of grief he idealizes and universalizes sadness, which is an essential experience of the soul in attaining freedom. The human soul becomes free by being stirred to its very foundation by some such scene as "the touch of a vanish'd hand" or "the sound of a voice that is still." When an individual feels so intensely he is on the royal road to freedom. To idealize grief and sorrow, to play upon the melancholy chord, to feel deeply some sad experience of life—these are true elements of liberation and freedom.

Tennyson leads us into the realm of the sorrowful by beginning with "the cold gray stones" and the thoughts that he can scarcely utter. Then he pictures the scenes of the fisherman and sailor and portrays some of the most touching images of human life, namely, the "vanished hand" and the "voice that is still." To realize the significance of this picture, one is ushered into the very threshold of death, and made to feel the intense grief of a still voice, the hand cold in death and the dead day.

Fourth Movement in Reading.—In the final mental movement in reading and literary study, the student is required to make a vivid picture of the imagery contained in the selection studied. The lesson is read carefully, studied critically as to form and content, reproducing the imagery first orally then pictorially. If the se-

Process
Of Freedom

Pictures

lection is short the pupil portrays the entire imagery, but in a long literary production as "Evangeline" or "The Great Stone Face," each student is assigned some definite picture and the class reproduces the total imagery. By a close study of the imagery of the selection in this manner followed by an artistic reproduction of it, the pupil is thoroughly trained in the appreciation of a literary work of art.

The philosophy of the method lies in the fact that internal ideas are objectified and made sensuous in drawings. The thought, spirit and essence lying dormant in the words, sentences, paragraphs, and stanzas are externalized in the particular, paintings. It is a process of estrangement and removal which harmonizes with the Process of Estrangement movement, growth and development of mind. In this process the mind in the selection was first estranged from the author when the piece was written. The pupil in rethinking the thoughts and imagery of the author, first pictures them mentally and then externalizes them on paper. After becoming absorbed in the spirit of the poem or prose selection, the pupil struggles with all his might to portray the imagery beautifully in external form.

"Lord Ullin's Daughter."—In studying this short poem the first image would be a picture of the daughter and lover standing on the bank of the river waiting for the ferryman. In the background is seen the sky, the moon, and a beautiful woodland scene. In the foreground is the ferryman

in his skiff crossing the river. The next picture illustrates Lord Ullin and his train of men on horseback in pursuit, plunging madly through the woodland. This scene is followed by another picturing the approaching storm, the ferryman, and the daughter and lover crossing the tempest-tossed river. The last imagery represents the denouement of the story picturing Lord Ullin standing on the bank of the river in the midst of a storm and beholding the empty boat.

"The Snow Image."—To portray the imagery of this beautiful story of Hawthorne, the pupil first paints a snow scene, including a snow ball, the home, the sun, and Violet and Peony in the yard. As the children are given permission by the mother to enjoy the snow-storm, the pupil depicts the following thought: "Yes, you may go out and play in the new snow." In the development of this fascinating story, a picture of the home, angel faces, Violet and Peony, and The Snow Image should be drawn to illustrate—"What other children could have made any thing so like a little girl's figure out of snow." Following the thread of the story, it would be interesting for some pupil to picture the thought of Violet's language: "What a nice play-mate she will make for us all winter." The Snow Image should be drawn in such an artistic manner as to bring out the following thought: "That color comes from the golden clouds we see up there in the sky." Another pretty scene shows the mother—"After opening the door, she stood an instant on

the threshold"—viewing the image, bedecked with birds, surrounded by Violet and Peony. The mother in utter astonishment exclaims: "It must certainly be one of the neighbors' daughters." The father should be pictured as he approaches the image and says: "Come! you odd little thing!" The final scene represents The Snow Image placed near the stove; "A good fire will put every thing to rights." As the image melts, Violet in her excitement and bereavement shouts—"There is all that is left of our dear little snow-sister."

"The Legend of Sleepy Hollow."—The following pictures were taken from actual work done in the class-room. Sleepy Hollow is graphically pictured near the Hudson river, enlarging into Tappan Zee. In this valley is situated Tarrytown, surrounded by hills, forest and a murmuring brook. The headless horseman is riding a vicious animal. The church is dismally located amid the graves of the original pioneers. Ichabod Crane is vividly portrayed in connection with the church in which he taught music, the boarding-house, and the school-house. The school is situated near the brook, amidst a forest of birch trees, in which are heard the complaining notes of the owl and the whippoorwill. The rustic Zaltus Van Tassel and his charming (?) daughter Katrina, are sketched at their home on the Hudson. In the barn yard are seen the porkers, the fowls and other evidences of thrift and industry. The mighty Brom Bones, the terror of the community, is drawn in Sampson

fashion. A most vivid picture is made of the little negro delivering the invitation to Ichabod, to attend the dance at Katrina's home. Ichabod unceremoniously dismissed the children, secured Gunpowder, and started on his way rejoicing. A very laughable picture of the dance is made with the pickaninnies looking on in the background. Daredevil, the property of Brom Bones, is pictured in contrast to Gunpowder. The last episode happened near Major Andre's tree. As Ichabod was approaching the famous bridge, he was hurled from his horse. The climax of the story is shown in the finding of his hat, saddle and pumpkin.

"**Hiawatha.**"—The following described pictures in colors were worked out by a class in the Model School. Hiawatha is painted with red feathers, black hair, the body in chrome yellow, the lower extremities clothed in bright orange and trimmed in red fringes. The ancient arrow maker painted in a tan color is standing at his wigwam. He is beautifully bedecked with feathers, face painted, and gorgeously attired. Old Nokomis dressed in true Indian fashion, is standing between a tree covered with green foliage and a wigwam watching the boiling kettle. Minnehaha, Laughing Water, is drawn as a very attractive Indian squaw with rosy cheeks and gala apparel. Hiawatha, Minnehaha and her father are portrayed *ensemble* in such a way as to illustrate the quotation: "Give me as my wife, this maiden." As Minnehaha modestly stands in the background, Hiawatha with out-

stretched arms is pleading fervently to her father, who is smoking a pipe. Six wigwams are drawn in different colors to represent "Welcome, Englishman!" Hiawatha is sketched with a deer thrown over his shoulder, and passing through a beautiful woodland, with the moon just appearing at the horizon. Gaudy colors are used and the picture is made realistic. After illustrating—"You are welcome, Hiawatha," an attractive picture is painted to represent the homeward journey. These drawings of Hiawatha show the study, the imagery and the artistic skill of the different pupils. The method creates unbounded interest and gives the students true literary culture.

"Enoch Arden."—This pictorial interpretation of Enoch Arden was worked out by pupils of the ninth grade: Annie Lee is drawn in a most exquisite dress of blue, trimmed in red and old gold. Philip's mill is located between two rivers, which are crossed by rustic bridges. The old, dilapidated tavern is situated on an elevated lawn surrounded by a forest. The village in the distance, at the bend of the river has a fine location, both artistically and commercially. "A lonely island" is sketched by one pupil, and another places Enoch Arden there, hailing the approach of a ship. A beautiful drawing is painted, showing Philip holding a rose, and Annie standing near him with a downcast look: "Then first since Enoch's ring girt her finger, Annie fought his will." Another scene represents Annie standing at the door and as Enoch bids her

adieu—"he waved his hand and went his way." The most vivid picture is a representation of Enoch lying on his death bed as Miriam Lane approaches.

In the same manner pictorial interpretations have recently been made by pupils of the Model School of—"Rip Van Winkle," "The Great Stone Face," "Evangeline," "Snow Bound," "Deserted Village," "Vision of Sir Launfal," Gray's "Elegy," "Courtship of Miles Standish," "Cotters' Saturday Night" and "Rhyme of the Ancient Mariner."

In the fourth movement in reading the pupil is required to read the selection in a slow, critical and analytical manner, noting the meaning of words, grammatical constructions, rhetorical elegance, the prosody, the allusions, kind of language and lesson taught. After the selection has been read and studied in a careful manner, the characters noted and its relation to the laws of the beautiful, the completed and continuous story must be told orally first and then reduced to writing.

The entire literary production is read and re-read until the pupil has a vivid picture in his mind of the complete thought embodied in the selection. He is then required to stand before the class and tell in story form, in his own language, the entire thought of the classic. In this manner the pupil incorporates into his life the beautiful thoughts of master minds, and is thereby given a desire to study and to appreciate literature.

The last process in teaching reading is to picture in tangible form the imagery found in the production which clinches and transmutes the thoughts of the classic into mind substance. In reading a selection the pupil has only a blurred image of the thought. These images must be studied, drawn on the black-board, sketched in the tablet and finally painted in water colors. The scenes must be studied from an artistic point of view and painted and colored in such a manner as to bring out the delicate shades of thought in the classic. When these drawings are completed they should be mounted and placed upon the wall of the school-room for inspection. This three-fold method in reading inspires the teacher, interests the children, and creates enthusiasm among the patrons of the school.

Pictorial
Study

XI.

THE METHOD.

METHOD is a real activity of a subject to be studied made to harmonize with an ideal activity of a mind to be developed. There is a method in every subject to be learned and a method in every mind to be taught and true method in teaching consists in exactly adjusting the pupil's mind to the corresponding thought processes in the objective world. Prof. William A. Jones originated the most fundamental conception of method known in the history of education; namely,

"The law in the mind and the fact in the thing determine the method."

The real problem in method is to unify the thought in the thing with the law in the mind.

The Thought in the Thing.—The thought in the thing is the universal principle of reason creating and sustaining the world. It is the living spirit of all that is, pervades all forms of life, produces all phases of activity and determines all method. The method of the fact in the thing is objective and formulates subject-matter apart from the learning mind. There is a certain type of activity developing the flora and another form creating the fauna of a country. Method in botany investigates the former activity and method

in zoology the latter, and in each case method is the peculiar constructive power of nature which develops the multiplicity of forms according to certain natural laws. Both the scientist and the philosopher teach that what is, is activity and hence method is a type of activity or a law of existence. A certain law of nature creates rocks and a different type of energy produces Saturn's rings. Method in mineralogy traces out the law of nature in rock formation, and method in astronomy investigates the subtle forces of nebular matter resulting in the rings. The tides are learned and taught by method in geography and the trilobite, by method in paleontology. Method in the common branches traces out the fundamental activities creating the various subjects, explains the organizing principle of each, and shows how mental life grows in and through a knowledge of subject-matter. The thought in a branch of study is its law or method and an insight into this method reveals its creative energy, and gives the clue to teach it. To understand how to teach anything means to study the thought as it creates the thing.

The Evolution of Activity.—All activity gradually develops into higher and higher forms until it becomes self-active and self-determined. The activity of the geode is a lower form than the activity of the sponge; the activity of the ape is higher than that of the hare. In the ascending scale of creation, activity is transformed into self-activity which conquers other forms and trans-

Activity mutes them into its own being. There is in the orange tree a self-activity, which causes it to grow, to branch, to put forth leaves, to blossom and to develop into fruit. The orange energy destroys things external to itself and appropriates them to build up its own tissues. To understand how to teach the orange is to trace out the intelligence found in its structure and to identify this knowledge with the orange activity in the learning mind.

A still higher form of activity is seen in the horse and lion. They destroy plant and animal life respectively and appropriate and assimilate these for the upbuilding of cells and tissues.

Higher Activity Locomotion, feeling and conformity to a definite purpose are added increments of life in the animal not found in the plant. Method in biology, treating life, differentiates itself into method in conchology in teaching "The Chambered Nautilus," and method in ornithology in studying "The Robin."

The highest form of self-activity is found in the human mind. While the plant and animal grow without plan or purpose, the human soul grows by setting up ideals—then struggling to attain them. Mental activity is an illustration of law; law is another name for method, and method is the peculiar manner in which a subject is formed. Method in engineering discusses the self-activity which constructed the Brooklyn bridge and method in literature gives the mode of procedure in teaching "Evangeline." The teacher of

method must be able to distinguish the various phases of self-activity and know how to reduce every subject of study to its original creative principle. This is the objective method and is the activity which gives form to grammar and history and arranges their divisions and subdivisions. The objective method in creating grammar must be distinguished from the subjective method in learning grammar.

The Parts of Speech.—The different parts of speech are treated in grammar and are objective to the teacher and pupil. The objective method traces out the origin of a subject while the subjective method analyzes the process by which it is taught and learned. To derive the parts of speech is an objective process because it takes into consideration the genetic principle of grammar.

IDEAS	WORDS
1. Object.....Pencil.....	Noun
It.....	Pronoun
2. Attributes (qualities)	
<i>a</i> Round.....	Adjective.
<i>b</i> Almost.....	Adverb.
<i>c</i> To fall.....	Infinitive.
<i>d</i> Falling.....	Participle.
3. Connecting	
<i>a</i> And.....	Conjunction.
<i>b</i> Is.....	Verb.
<i>c</i> On.....	Preposition.
4. Any more?	

There is a method of thought which creates the noun and a different shade of thinking that produces the conjunction. The parts of speech originated

in thought processes objective to the pupil who studies grammar and may be illustrated by thinking the lead-pencil. The ideas used in thinking are expressed in words classified according to their use and are named parts of speech. The lead-

Noun pencil is first thought as an object and the word which expresses the name of that idea is called a *noun*. In thinking the lead-pencil there are certain words (as *it*)

Pronoun which designate objects without naming them and are called *pronouns*. The mind is next directed to the attributes or qualities of the pencil as round and that part of speech which

Adjective expresses an attribute of a substance is known as an *adjective*. The mind may think the lead-pencil more closely and clearly observe that it is not round but almost round. Almost

Adverb is an attribute of round which is an attribute of pencil. That part of speech which expresses an attribute of an attribute is named an *adverb*. In thinking the lead-pencil to

The Infinitive Verb fall or falling, attributes of action are discerned which, clothed in words, are called respectively — *infinitives* and *participles*. Garfield once taught:

“A participle is the skin of a verb stuffed with the bran of an adjective.”

‘ In continuing the thought processes concerning the lead-pencil it is considered round and long. And is a word which expresses relation merely

without performing any other function of thought and is known as a *conjunction*. When we think the lead-pencil is long we use another connecting idea which is the essential element of the sentence. The *verb* is that part of speech that asserts an attribute of an object. The pencil may also be thought in connection with some other object and the relational activity of mind is brought into use in expressing the thought that the pencil lies on the table. The *preposition* (on) is that part of speech which expresses a relation and which governs an object.

Conjunction

Verb

Preposition

Since the interjection is an expression of emotion or isolated feeling, and not the result of thought it is not a part of speech. It is not an element of the sentence and, like the expletive, has no grammatical relation with other words.

Interjection

Perhaps, there are other parts of speech which may be "dug out" of the lead-pencil by other processes of thought. We have thought out eight different ideas in relation to the pencil (the infinitive and participle having the same function of thought).

We think again and again to see if there are other new relations possible for the expression of thought. Since the human mind is not able to think a thing under more than eight distinct relations (ten categories by Aristotle) there are only eight parts of speech.

Eight Relations

This is the objective method in grammar and expresses the genetic principle which brings the

The
Genetic
Principle

science into existence. This same thought power divides the parts of speech into their divisions and subdivisions, and classifies the subject-matter of grammar according to the law of mental activity. Grammar is the science of the sentence and the sentence is the basis of all work in language lessons, composition, reading, grammar, rhetoric, philology and linguistics. Thoughts are classified into those having the intellectual phase prominent, those having the emotional phase prominent and those having the volitional phase prominent. The thought sentence is divided into the declarative and the interrogative. The feeling sentence is exclamatory and the willing sentence, imperative.

Evolution
Of a
Sentence

In studying the evolution of a sentence it is interesting to note that it is organic not mechanical, that it originates in a sentence-germ, a kind of psychological fire-mist and that it grows and develops according to certain psychological and sociological conditions. The sentence is evolved out of the inner consciousness of the mind, differentiates itself into the parts of speech and hence is not a mechanical process of coupling words together. The law of sentence evolution and growth may be illustrated as follows: While sharpening my pencil I accidentally cut my finger and exclaimed, "Ouch! I cut my finger." Before the thought originated, before the sentence was expressed, there was a confused, vague, undifferentiated feeling of pain, a jelly-like mass of

thought which was first expressed in the so-called interjection (an expression of feeling and not of thought) and which finally develops into the sentence. Feeling, we are told in psychology, is the basis of all conscious life which develops itself into a two-stemmed thought, self and cutting, the agent and the manner in which the agent acted. As thought develops the sentence branches, divides and subdivides in proportion to the intensity and breadth of thought. The diagram is an X-Ray photograph which pictures the sentence anatomy and is a valuable device, since it shows the law of growth and development of the sentence.

Pedagogy of the Adjective.—An intense study is now made of the adjective to illustrate how the fact in the thing harmonizes with the law in the mind. An adjective has been defined as a word which describes an attribute of an object. An attribute is an energy working through matter and limits and defines the nature of a thing. Adjectives are developed in accordance with the nature of attributes and are usually found in pairs. If the adjective has no mate it has either lost its original meaning or its mate has become obsolete. The adjective differs from the other parts of speech in excluding the antagonist; good, bad; large, small; asleep, awake; alive, dead. In teaching the adjective it is necessary to understand the thought distinctions between the classes of adjectives. Limiting adjectives leave out objects, as *ten* mice; qualifying adjectives leave out attributes,

as *white* mice; the limiting adjectives exclude all mice except the ten and the qualifying adjectives exclude all except the white. Again qualifying adjectives individualize, as *black* ink; predicate adjectives universalize, as ink is *black*. In the former, black individualizes the ink to one particular kind and in the latter, black has a wider sweep of thought than ink and is said to universalize. It is the nature of the adjective to increase the comprehension and to decrease the extension. A red apple has a greater extension but less comprehension than a sweet, mellow, red apple. Limiting adjectives affect the extension while qualifying adjectives not only express the quality but limit the extension. In the sentences—Mellow apples are good.—Ripe nuts are palatable.—the quality only is affected. In the sentences—Good boys die young.—Tall trees make long shadows.—the extent is affected.

The nature of the adjective is such that it requires five movements of mind to think it. First, the mind perceives the adjective, *good* chair, *brittle* chalk. Second, the mind images the meaning back of these words, as *good* accomplishes an end, and *brittle* expresses the idea of friability. In the third movement of the mind, a comparison and contrast is made of the form of the two words, *good* and *brittle*, and then of the meaning by comparing and contrasting the images back of the word. This movement of the mind is analytical-synthetical and notes likenesses and

Thought
Distinctions

To Think
The Adjective

differences. The fourth movement in thinking the adjective is a process of reasoning, as follows:

All good chairs are comfortable,
This chair is comfortable,
Therefore, this is a good chair.

All brittle chalk is friable,
This chalk is friable,
Therefore, this chalk is brittle.

In thinking the adjective the mind finally moves in a syllogistic process which is a form of thought in obtaining any knowledge. Lastly, the mind generalizes, names and gives a logical definition of the adjective as follows: An adjective is a word which describes the name of an object.

In teaching this part of speech it is necessary to take into consideration the thought in the thing and the law in the mind. The objective method is the energy producing attributes, the activity creating adjectives and the force necessary to their classification. The subjective method is the activity of mind in thinking the adjective, the spiritual energy translating it into the mind and the mental force transmuting the real into the ideal. It makes a study of how the mind acquires the knowledge of the adjective, how the adjective is changed into the self, and how the self becomes the adjective.

Object and
Subject
United

In studying and teaching the adjective, the pupil's mind follows the five processes of thought in learning it, while the teacher's mind follows the

pupil's mind in each process, thinks the pupil's mind into unity with the adjective, and brings the adjective into harmony with the mind of the pupil and assists him in making it a part of his thought.

Teaching
And Learning
An Adjective

The adjective now becomes translated into the pupil's life, affects his character and aids in the evolution of the individual.

To think an adjective is merely to gain the thought processes in it, but to teach it is to transmute the thought and spirit into the mind and soul of the pupil, to the end of knowledge, character, growth, development and spiritual freedom. The pupil realizes himself in the adjective and the adjective attains its final purpose, when both are reconciled, and harmonized into freedom of thought and freedom of life.

The Law in the Mind.—It is difficult to discuss the fact in the thing without taking into consideration the law in the mind. The subjective method is the activity or force which transmutes the ideas and thought of subject-matter into the living energy of mind. It is that activity which makes the facts of history, grammar and other studies subjective to the thinking mind. There is a method which creates the parts of speech and another mental process which makes them a part of the mind's constitution. The former has been called the thought in the thing and the latter the law in the mind. These two modes of activity are distinct and apart, yet resolvable into each other. Knowledge has been defined as an organic

Subjective
Method

process existing between subject and object. All mental growth or development is a process of adjusting the subject to the mind, of translating the subjective into the objective, of mind identifying itself with matter and of the internal unifying itself with the external. This doctrine of method is corroborated by the following authors.

Dr. Arnold Tompkins in his discussion of the universal law of teaching, maintains that:

"The universal problem of method is, how the learning mind identifies itself with the objective world to the end of growth,—how the subjective becomes one with the objective, in the process called knowledge."

Prof. Howard Sandison defines method as follows:

"A real activity according to, and in harmony with an ideal activity."

He further writes:

"Method is the fundamental movement of mind in the examination of an object with reference to a given attribute that has been exalted and emphasized by the mind's interests."

Rosenkranz in discussing the logical presupposition of instruction sets forth a similar doctrine:

"The subject must be adapted to the consciousness of the pupil. . . . The living mediation of the pupil with the content which is to be impressed upon his consciousness is the work of the teacher."

He means by this that the subject-matter must be adjusted and adapted to the mind taught and there is an interpenetration between the mind of the pupil and the thought of the lesson.

Dr. Charles DeGarmo in his preface of "Essentials of Method" gives the same thought; namely, that there is a method in the child and a method in the subject of study. He would have the method in the subject to harmonize with the stages of growth in the mind of the child. As the subject develops it must correspond to the identical development of the learning mind.

Dr. R. N. Roark in speaking of mind and method writes:

"To knowledge of the subject-matter, and knowledge of mind and mind growth, he (the teacher) must add knowledge of how to bring subject-matter and growing mind into such contact as shall cause mind to react normally on knowledge-material, and to acquire, assimilate and express."

These educational thinkers are trying to solve the problem, how mind becomes matter or how matter becomes mind; how history becomes mind or how mind becomes history; how mind becomes grammar and how grammar becomes mind. The law in the mind attempts to solve the problem, how a lesson may be transformed into human consciousness, or how the human mind takes on those forms of thought found in the objective world.

Mind Movement in Method.—The fundamental movement of consciousness in gaining knowledge is a thinking process. To think a thing is to unify the thought in the thing with the law in the mind. There are four phases in this process: Perceptive thinking, analytical thinking, synthetical thinking and thought thinking. To

To Think
A Thing

illustrate these stages in the process of knowing, the human eye may be made the basis of thinking. By perceptive thinking the mind differentiates the eye from the other parts of the body. The mind first grasps the eye dimly, vaguely and in an indistinct manner. By analytical thinking the eye is analyzed into its parts and attributes; namely, coats; sclerotic, chorioid, retina, and humors; aqueous, vitreous, crystalline lens and into other parts. The next stage of thinking, the synthetical, unifies and organizes all parts and attributes into a completed whole. The mind is a unity and is not satisfied with multiplicity, but seeks constantly to synthesize what it originally analyzed. In the last stage of knowledge, thought thinks thought as the creative energy of the eye. The mind recognizes its own process in the processes constituting the eye. To understand the intelligence in the eye is to see the self reflected in it. Both the eye and the mind are the unfolding of the eternal process of the universe and both must be finally unified in teaching and learning into a bond of spiritual freedom.

In the fundamental movement of mind the vague feeling becomes enlightened feeling, dim knowledge becomes clear knowledge, and the thing thought becomes the self.

Method in History.—The thought in history is the active energy bringing events into existence, as—The First Steamboat—The Purchase of Louisiana—The Boston Tea Party—The Panama Canal.

**Thought
In Thing**

The law in the mind is the process of changing the event with its ideas, thoughts, feelings and volitions into the inner constitution of the human soul. History has an emotional element which trains and affects the feelings, as—the death of McKinley, the duel of Hamilton and Burr, and the spirit of patriotism which touches, arouses, and develops the emotional nature of the child. Many passages in history stir up the child to do things and give him an impulse to higher life, as—"I'll try, sir!" "Don't give up the ship!" "I've just begun to fight!" and "I'll fight it out on this line if it takes all summer!"

To illustrate the law in the mind and the fact in the thing, a study is made of "The First Steamboat." The first step in studying an event is to seize dimly the imagery of the topic.

**Law in
The Mind**

In the next movement the mind analyzes the event into, Clermont, Robert Fulton, Hudson River, 1807 and other attributes, parts, ideas and thoughts. These isolated attributes and parts are not "The First Steamboat" and so the mind must synthesize these elements into the original whole, and the indistinct knowledge becomes truly the self. In the last step the pupil rethinks the thought of Fulton as he thought out the steamboat and hence arrived at the genetic principle of the event. He recognizes "The First Steamboat" as a thought process, it becomes he, and he becomes it.

Method in history can be understood and explained only by a knowledge of the facts and prin-

ciples of history and by an analysis of the powers and processes of mind. History must be resolved into mind processes and mind must be mediated, adjusted to the historic process. Each element in history must be organically related to a corresponding element of mind; perception to perception, image to image and thought to thought. Should an event be presented to a child involving an abstract process of reasoning the teaching act would be unpedagogical because the child's mind is not in harmony with the higher form of mental life. Were it possible for a teacher to know the inner constitution of history and to have at the same time a delicate knowledge of the out-croppings of the human mind, then teaching would be based upon an exact science and philosophy.

Facts
Plus Mind

Dr. W. H. Mace has clearly analyzed the history process into five institutional ideas: Political, religious, educational, social and industrial. Each of these fundamental principles represents a great institution—government, church, school, family and occupation. According to this doctrine, history is a stream of growing institutional ideas and deals with the complete life of a people.

Institutional
Ideas

Primary history should be individual, biographical and should be written in a most pleasing story form to introduce the child to the local institutional life. The mayor, preacher, teacher, the social organizer, and the manufacturer should be studied to introduce the child into a knowledge

Primary
History

of institutional life. After the child has studied these different institutional ideas, in his own community, he should be led to study the same facts in the county, state and nation. He is now introduced into the realm of history proper and must study national characters representing the five institutional ideas: Political, Thomas Jefferson; religious, John Wesley; educational, John Harvard; industrial, Thomas Edison; social, Jane Addams.

In the intermediate grades the historic process changes from biographical studies to that of community life. The five institutional ideas are dis-
Intermediate History cussed, not as constituting individuals, but embodying a body politic. In the local community the town council is studied to represent the political idea; the church, religious; the city school, educational; the bank corporation, industrial and the Tennyson Club, the social. After the pupil has studied many examples of local institutional life, in city, county and state, he is prepared to study the complexities of national life; namely—political, Declaration of Independence and Constitution of the United States; religious, The Christian Endeavor and Ecumenical Conference; educational, The Smithsonian Institution and The National University; social, Social Settlements and Fraternal Orders; industrial, The United States Steel Corporation and the International Harvester Company. The pupil must study and realize that history treats of the entire life of a people and that he must under-

stand that the central and organizing principle of history is the growth of institutional life.

Method in history shows how these objective institutional ideas are to become subjective to the thinking mind. It adjusts, adapts and mediates these thoughts, found in human events, to the corresponding phases of growth in the life of a child. The child's political, religious, educational, industrial and social life are adjusted to similar phases of life exhibited in the growth and development of a nation. The different stages of child life are developed in and through a study of similar phases of national life.

Method
In History

Method in Language.—Method in spelling, language and composition is based upon the fundamental unity between the mind and the thing it thinks. In spelling the mental movement is to see the word, to picture the image upon which the word depends and to analyze it into letters, sounds and syllables. These mental attributes are synthesized and the word is thereby transmuted into mind substance. In this last act mind thinks mind as embodied in the meaning of words.

Mental
Movement

The external means used in this mental movement are objects, pictures and stories. In order to intensify the interest, to bring the motor into use, and to put the child in a receptive attitude, the object and picture should be pasted on the composition paper. Beautiful pictures of a horse, house, apple, berry, peach, plum,

Means

pear, peas, melon, grapes, lion, dog, sheep, are inspiring and thought-producing. A combination of form and color, as a red square, a blue triangle, a purple rectangle, a green circle, a pink pentagon, and a white oval is in harmony with the law of correlation, and introduces the child into the meaning of words.

In the realm of perceptive thinking, the child is led into the world of objective reality, by observing, by absorbing and by inquiring the name, the word and the spelling of objects. In the first mental movement "Words, words, words" are to be taught the child from an infinite number of objects.

The next step in language is to combine words—orally, then in writing—into sentences, paragraphs and discourse. In order to bring the child's motor activity into use and as a means of "busy work" the child pastes objects and pictures upon paper preparatory to writing a composition. Such objects as lead, glass, tea, spice, nutmeg, sugar, salt, ostrich feather, fish scales, sponge, cotton, silk, rubber, sand, etc., are inspiring, stimulating, and thought-producing. The Perry pictures or the Cosmos pictures, including master pieces of art, are especially adapted to composition work. The pupil now writes from internal interest and not from external pressure. He is brimful of interest and writes because it is a pleasure. It is said that when Longfellow was required to write his first composition, after making several unsuc-

cessful attempts, he informed his teacher that he could not write it. The teacher requested him to leave the school-room, to talk to himself about some object, to put this talk on paper and he would accept it as a composition. It is said while Longfellow was sitting on the fence looking at Mr. Finney's turnip-patch, he was inspired to write his first poem. Longfellow was so intensely interested in the turnip that the composition was spontaneously created. The idea of the turnip in the mind of the youth pressed for utterance. He had a message to communicate and felt a joy and pleasure in expressing his thoughts. His ideas were externalized in sentences and stanzas and the result of this objectification of ideas and thoughts was a composition.

Themes in Composition.—Themes in composition should follow the law of universal creation. The fundamental law of the world is a process, a becoming, a cycle, a return-to-itself. Compositions should accord and harmonize with the actual processes of nature. The various members of a class should write a narration of the complete process found in the life, growth and development of an oak tree, for example, to illustrate this fundamental principle: The themes should be the acorn, the process of germination, the roots, the trunk, the branches, the leaves, the blossoms, the fruit and the acorn. The movement in the composition should follow the fundamental movement in the tree. This process or cycle is a cosmic principle

which Spinoza says should be thought under the form of eternity.

THE CYCLE OF THE DRAGON-FLY.

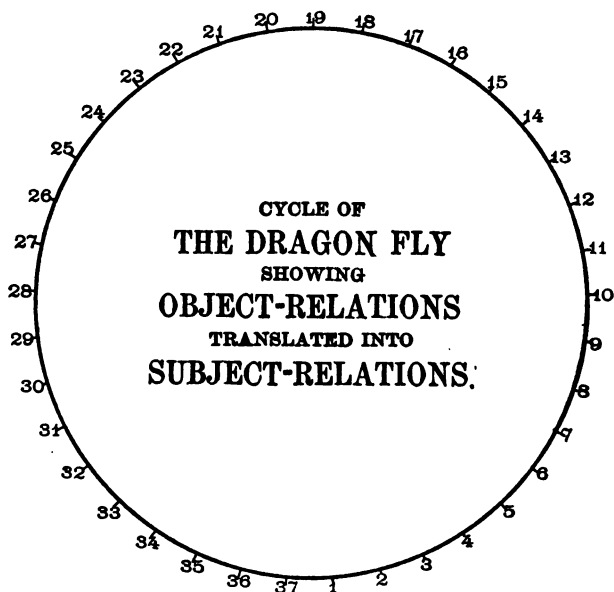
"To-day I saw the dragon-fly
Come from the wells where he did lie.
An inner impulse rent the veil
Of his old husk; from head to tail
Came out clear plates of sapphire mail."

—TENNYSON.

This poetry is given simply to illustrate the idea of the cycle. To emphasize the value of the process, the becoming, the cycle, the return-to-itself, "The Cycle of the Dragon-Fly" is given to show the movement of thought following the movement of creation. This discussion is taken from an article in *The Inland Educator* written by Prof. Howard Sandison. In order to make the activities of the mind in the composition correspond to the activities of the dragon-fly, the arrangement of the process is given on page 177.

This cycle shows the metamorphosis or transformation of the dragon-fly. It gradually becomes more complex, more perfect and more free, and hence realizes the purpose of its being. The dragon-fly attains its physical freedom, and the pupil in following, mentally, the physical process attains his spiritual freedom, so far as this object is concerned. This beautifully illustrates the doctrine that the law of thinking harmonizes with the law of being. There are certain objective categories in the dragon-fly that parallel certain subjective conditions of the

human mind. Those subjective laws or thoughts are the mind's way of thinking the objective world.



1. The fly attaches its eggs to a stem of a water-plant. 2. The eggs hatch out into a bug-like larva. 3. The larva walks about on the bottom of the lake. 4. It leaps through the water. 5. It sees many insects. 6. It devours them. 7. It grows very fast. 8. It grows too large for its shell-like skin. 9. It bursts its skin. 10. It throws off the bursted skin. 11. It moves through the water. 12. Its skin gradually hardens. 13. It eats many more insects. 14. It outgrows its skin again. 15. It bursts its skin. 16. It throws off the outgrown skin. 17. It now appears as a pupa. 18. Its skin soon hardens. 19. It moves about in the water. 20. It eats more insects. 21. It grows larger. 22. It approaches a water-plant. 23. It climbs upon the stem of a water-plant. 24. It reaches the open air above the water. 25. It grows too large for its skin again. 26. It bursts its skin. 27. It casts off its outgrown skin. 28. It emerges a Dragon-Fly. 29. It clings to the stem of the water-plant. 30. Its skin hardens. 31. Its wings become dry. 32. It loosens its hold of the stem. 33. It flies through the air. 34. It glistens in the sunlight. 35. It hovers over the lake. 36. It alights on a water-plant. 37. It attaches its eggs to the stem of the water-plant.

CATEGORIES OF THINKING AND BEING.

1. **SUBSTANCE.**—The dragon-fly is an insect.
2. **QUANTITY.**—The dragon-fly is two inches long.
3. **QUALITY.**—Its wings become dry.
4. **RELATION.**—It emerges a dragon-fly.
5. **PLACE.**—It attaches its eggs to a stem.
6. **TIME.**—It bursts when it grows large.
7. **POSTURE.**—It alights upon a water-plant.
8. **CONDITION.**—It grows larger.
9. **ACTION.**—It flies through the air.
10. **PASSION.**—The dragon-fly is metamorphosed.

The Final Doctrine of Method.—The doctrine of method is one with the doctrine of philosophy—to show the relation between the objective world and the subjective world. It is the law of the human mind that it parallels in its function the law of the universe so far as its capacity is able to grasp. The result of the mind's return-to-self is spiritual freedom. The history and evolution of method bears a close resemblance to the history and development of philosophy. Originally, method was considered an artificial or cunning device and later it implied a knowledge of certain psychological activities. Method is now considered a fundamental movement of mind harmonizing with the central organizing principle of a subject. In the beginning of philosophy, water, fire, air and the infinite, were respectively elementary principles of the world. Later, spirit or *nous* became the foundation principle of the universe. The modern and more correct doctrine of the universe seems to unify mind and matter and that every thing is

Evolution
Of Method

material and meaning. Nature is material and meaning, the piano is material and meaning—each is not material alone nor thought alone. The thought “piano” revealed in and through a particular material, the material and ideal unified in a concrete whole, constitute the piano. Method in teaching must explain this mysterious unity and show how subjects should be taught to harmonize with the above doctrine.

XII.

THE PURPOSE.

THE growth process in teaching has a movement, a method and a purpose. The movement is the general way in which the mind acts in learning, in and through the teaching process. The method is the process of harmonizing and unifying the outer world (the branches of study) with the inner life and thought of the pupil. The purpose of teaching is to inspire pupils to higher life and make them realize their true worth and destiny. Each act in teaching is purposive, every lesson recited has an end, and every process in education has for its final aim—the evolution of the individual.

The Historic Purpose.—The history of education traces out the aims in education and the purposes in teaching and gives a setting or background for all educational thought and activity. Long ago a great thinker said: The true purpose and destiny of man is to perfect himself. This end was attained by *communicating* rather than *developing*, by telling, showing, disciplining while the pupils memorized, listened and imitated. Physical training was cultivated simultaneously with mind training; thinking and talking, with running and jumping. Early educators insisted on a sound mind in a sound body and taught that

the real purpose in teaching is to arouse the self-activity of the pupil. To begin with sense-intuition, observation, induction, and experimentation, were fundamental principles, and all learning was thought to be naturally agreeable, provided the teacher starts with known truths and known concepts.

Modern education as well as modern philosophy begin with the proposition, "I think, therefore, I am." The individual's essential nature is found to be thought, mind, soul, intelligence, reason, and that all education has for its New
Education ultimate purpose—the training in thought power. This led to the doctrine that spiritual activity ends in knowledge, and that knowledge enables the individual to act rationally and, therefore, makes him free. The whole educational movement becomes a process; the school is a process; teaching is a process; thinking is a process; life is a process, and the universe itself is a process. Teachers began to preach the gospel of universal education and insisted upon a harmonious and uniform development of all the powers and faculties of mind. The ultimate purpose in teaching is realized by using the following principles:

1. Activity is the law of childhood; educate the hand; accustom the child to do.
2. Cultivate the faculties in their natural order; first form the mind—then furnish it.
3. Begin with the senses and never tell a child what he can find out for himself.
4. Reduce every subject to its element; one difficulty at a time is enough for a child.

Principles
Of Teaching

5. Proceed step by step; the measure of information is not what the teacher can give but what the child can receive.
6. Let every lesson have a point, either immediate or remote.
7. Develop the idea and then give the term; cultivate language.
8. Proceed from the known to the related unknown; from the particular to the general; from the concrete to the abstract; from the simple to the difficult.
9. First synthesis and then analysis; not the order of the subject, but the order of nature.

These fundamental principles of teaching are next combined with the old education, and psychical life is considered a kind of dynamic chemistry of ideas, and consciousness is said to depend upon the tension and intensity of ideas. If ideas are pressed below the threshold of consciousness they become impulses. This psychology (called by some mythical) explains how new ideas are assimilated to old ones—apperception. Psychology becomes the basis of all work in pedagogy and the final purpose of education is moral training. This pedagogical theory may be contrasted with the educational doctrine that education is conscious evolution. “The Prince of Educators” makes all teaching a development of self-activity induced by certain external stimuli. Acquisition, assimilation, and expression of knowledge must be a work of liberty and spontaneity.

The final purpose of teaching and education is to transform the child’s potence into actuality. Education is a growth in self-consciousness and leads the individual into a reflective consideration of self as estranged from self. Spirit

Perfection

objectifies itself, rethinks itself, and becomes conscious of its own essence. This doctrine culminates in self-realization and perfection, the final and supreme aim in all teaching and education.

Means and End.—The teacher should have a clear distinction between efficient cause or means in teaching and final cause or end in life. The teaching act employs certain external factors, textbooks, apparatus, and knowledge which are necessary to accomplish a definite aim in life. To the thoughtful teacher every process in teaching, every law in government and every principle in education presuppose some definite end in life thought out. The ideal teacher does not teach a subject until he realizes what effect it may have upon the final purpose and destiny of the pupil. The purpose in the life of a child should be thoroughly understood and made the basis of every movement in teaching. To teach in a hap-hazard way, without foreseeing the end in each act, is to fail to teach in the true sense of the word.

The school is an organized product of mind and has inherent in it a reciprocal relationship between means and end. There is nothing purposeless in the school; nothing that is not determined by the original school idea which brought it into existence. This fundamental teleological principle organizes the school and determines the universal law in teaching. It is that final cause which the teacher holds in mind while molding the efficient factors into terms of life. The design in teaching is a

Teaching moving force which realizes itself in the
Purposive pupil's life through certain efficient forces found in the recitation. Teaching is a purposive act and aims not at knowledge acquired, and pages recited, but at the complete evolution of the individual into a higher and nobler life. It is not merely an intellectual, social, æsthetical and moral process, but has a deep design hidden in its nature that leads the pupil into unity with the purpose of the world.

When the teacher studies the parts of the school and their organic relation to each other, he is in the realm of efficient causes; but when he considers the purpose of the school, in relation to life, he is led to contemplate and study final causes of the educational process. The pedagogical student cannot understand the aim of a process in teaching by examining the machinery, but must penetrate into the inner subjective school to get an idea of its purpose or design. The nature of a thing is not found in sense perception, but in reason which constitutes its essence. To understand the nature of the school is to penetrate its creative energy and

Purpose to understand its creative purpose. The
Creative school can be explained only by knowledge of the idea and end of its existence. It is not based upon mechanical laws, but requires a principle having a definite end in view. This principle explains the ultimate purpose of the school and gives a definite aim in teaching. The teacher must be able to look beneath the multiplied activities of

the school and detect the all-sufficient cause which gives law to its existence. To distinguish the teaching process as design from the teaching process based upon mechanical laws is to understand that universal factor which determines the various activities of the school and gives a clue to its purpose. The understanding conceives the school as a whole depending upon its parts, while the intuitive insight arrives at the inner content and meaning of the forces and factors depending upon the whole. To think the school and its function is to trace back its final cause which realizes itself through certain external paraphernalia. The idea of design bridges the chasm between the objective and subjective school and shows that means in teaching should be in harmony with the final aim in education. To study the aim in teaching is to use the *heuristic* principle of inquiring into its inner nature and to understand the relation between means and end. There is a finality in every process in teaching which must have a cause. This cause does not lie in the external objective school, but in the inner spirit and life of the organism. The end in thought creates the school and moves forward to its realization through certain means adapted to its expression and purpose. To attain a maximum skill in teaching is to grasp firmly the fundamental aim in education which is one with the purpose of life.

Finality in
Teaching

The Supreme Purpose.—The supreme aim in teaching is to transform knowledge into life, to

make grammar, arithmetic, history and other subjects life unfolding instruments. Teaching unites the not-self with the self by means of a spiritual principle which is presupposed in the difference of subject and object. The entire life of the school is a reciprocal action between these two forces whose resultant is knowledge and culture. We can know the object only in unity with the self and we can know the subject only as it is realized in the object. The final aim in teaching is to recognize that subjects of study exist in opposition to and in relation to the mind and that the self exists only as it realizes itself in history, grammar, etc. Grammar is opposed to mind yet contains an element which sustains an organic relation to mind. Subject-matter and mind are extreme terms representing a difference which is essential to rational life. The subject presupposes the object yet both are rooted in a higher spiritual principle which indicates a unity in difference. It is the purpose of teaching to show the relation between subject and object, inner and outer experience, and to understand how these two elements are distinguished, yet never disjointed. The teacher's duty is to unite and relate the consciousness of the subject, to the consciousness of the individual studying. There is no impassable gulf between the inner and outer world, but there is organic unity in their difference. The life of the child is not disjointed from all outer experience for his inner self is nothing but a return upon himself from the outer world. The teaching process

**Final Aim
In Teaching**

clearly reveals the fact that self-consciousness, cut off from the objective world, is an absurdity and that the branches of study can be understood only in relation to the thinking self. The movement by which the teacher transforms subject-matter and makes it the basis for spiritual development, is an evolutionary process which manifests that unitary principle conditioning and underlying all life. A deep study of modern science, literature and philosophy discloses the fact that the teacher is the polar opposite of the child and that the objective world, as the ultimate expression of the curriculum, is the all-sufficient, unitary, eternal force which organizes these seemingly contradictory elements into a bond of spiritual freedom.

According to Kant the impulse which stimulates us to grow is due to three ideas—the world, the self and God. Our intelligence is based upon a pre-supposition of these ideas and are the final aims in knowledge. One purpose in teaching is to demonstrate the unity of the world amidst its complexities and to show the interconnections and relations existing between the different parts and laws. To interpret the outer world the mind must seek an ultimate unity revealed in differences between object and subject. According to a great modern thinker, "Every step toward the conception of the world or of any part of it as a system, every step toward the comprehension of the unity of the intelligence in all the variety of its activities, every step toward a rational view of the relation between

Unitary Ideas the intelligence and the intelligible world, is a step toward the verification and, in an etymological sense, the *demonstration* of the principles of unity presupposed in the whole process." It should be the duty of the teacher to reduce the manifold, in the various lessons, to unitary ideas to be transmuted into mind substance. The true purpose in teaching is to trace the multiplicity of facts in a given subject back to its original creative source, as the facts of history back to its institutional ideas, and forms of sentences in grammar back to their original creative principle, and the numerous problems in arithmetic to the ratio idea and finally to unify these branches of study into a generic whole.

To seek constantly for the unity of things lifts the student finally into the absolute unity of the world. Both the teacher and the pupil are forced from the very nature of consciousness **Divine Unity** itself to presuppose an Infinite Mind as the source of all consciousness and the first and last principle of all knowing and being. The ultimate purpose in teaching is to trace out the divine unity holding the world together and to induce the pupil to be a partaker of the divine idea and, therefore, to attain his freedom.

This supreme purpose in teaching has been discussed to lead the teacher and the pupil into the highest conceptions of life and to make them responsive to the soul's true worth. These high ideals give the mind an impulse to know the world,

to understand the secrets of the mind and finally to unify itself with the outer world through an infinite unity or God.

Oliver Wendell Holmes most beautifully pictures the purpose of teaching and education:

"Teacher of teachers! Yours the task,
Noblest that noble minds can ask.

High up Æonia's murmurous mount,
To watch, to guard the sacred fount
That feeds the streams below;
To guide the hurrying flood that fills
A thousand silvery rippling rills,
In ever-widening flow.

"Rich is the harvest from the fields
That bounteous Nature kindly yields;
But fair growths enrich the soil
Ploughed deep by thought's unwearied toil,
In Learning's broad domain.

And where the leaves, the flowers, the fruits,
Without your watering at the roots,
To fill each branching vein?

"Welcome! Author's firmest friends,
Your voice the surest godspeed lends.

For you the growing mind demands
The patient care, the guiding hands
Through all the mists of morn.

You knowing well the future's need,
Your prescient wisdom sows the seed
To flower in years unborn."

THE TEACHING PROCESS

THE THINKING PROCESS

XIII.

THE LAW

THE fundamental law in teaching parallels the essential law in thinking. To teach a pupil is to cause him to think; to think is to translate object relations into mind substance; to know is to recognize the relations which constitute a thing. The organic elements of thinking are mind activity and a process of unifying mind with thought external to itself. Mind grows by identifying itself with mind embodied in the external world. It attains its freedom when it realizes its possibilities, and when it takes on to itself the spiritual content of the universe. T. H. Green says:

“Our conception of an order of nature and the relations which form that order, have a common spiritual source.”

By thinking, the individual enters into the inner essence of things. The thinker finds behind all things—thought. He discovers in things his other self, identifies himself with himself, and thus realizes his true nature. In the learning process, the student finds in subject-matter a self-activity akin to his own nature. There are just two elements in all thought processes: the thinking mind and the thing to be taught. In studying botany the mind

is one organic element and the plant is the other. The knowledge called botany is a mental synthesis of mind life and plant life. When the object relations are grounded into subject relations the result is called botany. In the ultimate analysis botany is mind rather than matter. It is that science which treats of the ideas and structure of plant life as interpreted by thought. The universal law of thinking may be expressed by the axiom given in method: The law in the mind must exactly correspond with the fact in the thing. The law of thinking requires a knowledge of mind activity and a scientific knowledge of things to be taught.

Organic
Elements

Thinking and Teaching.—In teaching, the teacher unifies the mind process with the object process by thinking the two together. The movement in teaching differs from the movement in thinking. The former process consists in following the thought of the pupil, and the latter process consists in following the thought of the subject. Reason or thought is the essence of both the thinking mind and the external world to be thought. If objective reality contains no thought, as a square fluid or a moral substance, it is unthinkable, for the mind cannot think that which has no thought element in it. To think the elephant is to trace the thoughts embodied in its structure, in its attributes and in its function. It is a process of uniting certain relations in the mind to similar relations in the elephant. If the

Reason
Or Thought

elephant contains no thought relations and there is nothing to which to tie mind relations, then it, too, is unthinkable. We are inevitably brought to the doctrine: "The rational is the real and the real is the rational."

Essentials in Thinking.—An ancient thinker set forth the relations by which an object exists. A modern thinker made these objective relations the subjective laws of thought. The mind in thinking an object takes on to itself a form of thought harmonizing with the passive thought in the thing. In the evolution and the history of thought, the next great thinker announced the doctrine
Thinking
that the law of thinking is equal to the law of being. The forms of thought found in things become the forms of consciousness. These two elements in thinking are organic because the process cannot exist without both. A recent thinker has worked out the most profound law of human thinking, as follows: To think a thing in existence is the same process as thinking the thing as coming into existence.

Thinking Genetically.—To think a thing genetically is to trace the thought in the thing as it comes into existence. To think the house as it is, is to think it in the process of becoming. To think the apple genetically is to follow the apple
Thinking
In a Cycle
process from the seed through the tree to the fruit. The most fundamental process in thinking a thing is to think it in its return-to-itself; to think it as a cycle; to think it *under the*

form of eternity. To think the watch is to follow the watch process in the mind of the maker; to trace out the universal, ideal watch creatively; to note the universal becoming individual through the material; to observe the metal transformed to suit the ideal; to think the adjustment and organization into a completed product. To think the watch in this manner is to transmute the watch process in its being and becoming into mind substance. To think the chicken is to trace the vital process as it divides and differentiates itself from a vague whole to a perfected individual. Things in nature divide, compare, exemplify and define themselves, as it were, and to know these things is to change these processes into mind terms. A study of the thinking process gradually leads the student into the realm of ontogeny and embryology.

The Movement in Thinking.—As thinking transmutes the object into the subject every conscious act is a thought process. There is one continued process of thinking from sensation to reason. The function of each mental act is to organize the world without with the world within through a common spiritual principle. Thinking in sensation is the act of uniting the ego with the external world through the senses. The factors in sensation are the world of experience to be internalized, the bodily organism as the medium of communication between mind and matter, and the psychical activity which negates and transmutes the object into mind terms. In this lowest stage

Sensation

of thinking the mind gradually passes from the external to the internal. "How the immaterial can be united with matter," says Sir William Hamilton, "is the mystery of mysteries to man." In regard to this problem materialism affirms that mental activity is due to some form of molecular motion. According to dualism the unity between mind and matter is incomprehensible. Idealism makes the objective world a manifestation of mind with which it becomes united. Occasionalism maintains that mind can know matter only through the intervention of God. According to the doctrine of pre-established harmony, God by divine fiat establishes a harmonious relationship between mind and matter.

In perceptive thinking the mind seizes some special object in the stream of sensation, identifies it with itself and particularizes it in the outer world.

Perception The movement of the mind in perception has a three-fold activity: Impression is a specializing of the object and the mind in an involuntary way; attention is the concentration of the mind upon a particular object and a unification of the object with the self. The mind attends to those objects in which it has an interest. An object is interesting which assists the spirit in gaining its freedom. In attention the mind particularizes itself, the object is particularized and ideated. Attention is, pedagogically speaking, the fundamental requisite of the school. A teacher must have the ability to arouse interest and thereby gain attention or the teaching act will be a failure.

Pupils must realize that the subject studied lies between their real and ideal condition of life, and that it is essential to their self-realization. The third process in perceptive thinking is retention which makes the ideated object permanent in consciousness. Retention is secured by following the maxim—Repetition is the mother of wisdom. Drilling and testing, in various ways, deepen the retentive process and are valuable exercises in teaching the different subjects.

In apperceptive thinking the mind assimilates, integrates and internalizes the external. It is a process by which the mind gives significance or meaning to mental products. In apperception the mind gains new knowledge through the related old. Early education should develop the apperceptive mass and give the pupil a basic foundation for later knowledge. Herbart gave apperception its true significance and made it ^{Apperception} the corner-stone of his pedagogy. The term was originated by Leibnitz who used it in the sense of self-consciousness. Apperception has a deep pedagogical value. Thinking is apperceptive, learning is apperceptive and the whole educational process is based upon the doctrine that knowledge assimilates knowledge.

Representative thinking deals with the image and is the intermediate mental state between perceiving the object and thinking thought. The human mind in its evolution passes from sense perception through the image to the supreme mental

act known as thinking. The stages of knowing are sensing, imaging and thinking. In perception the mind is trying to internalize the external. Imaging is a process of looking at the percept from within. It is the mind's view of the object as seen apart from it. In the movement of the mind in memory-thinking the image of the object is separated, identified, retained, recalled, recollected, represented, and recognized. The image is not stored away in some brain-cell and memory is not "habit working in the nerve-centres." The mind is not local but ideal and immaterial. Memory is unfolded genetically out of the mind's own process and its essential characteristic is recalling the image. The law of association is found in the mind's own process which is unitary and dual.

Memory

"No external law can bind forever the ego whose essence is to be self-legislative."

Imaginative thinking reproduces the image and separates it into form and meaning. The image is not a copy of the object but now becomes a copy of the mind itself. "The alien copy of external nature is now to undergo a transformation till the ego can see itself; see its own meaning in the image. Previously the ego has been chiefly a mirror of the outside world, and the image has been a true likeness of the object. But the ego is more than the simple mirror, it in its innermost essence is also the thing mirrored." The imagination does not reproduce the image as in

Imagination

memory but puts new meaning into the object itself. The whole movement of imagination hinges upon the mind's scission into symbol and significance. Gesture, voice and picture-making are forms of symbolism in which the mind is struggling for freedom. The dual form of mind activity becomes more and more pronounced and is illustrated by the symbolic expressions in literature, *i.e.*, metaphor, parable, simile, riddle, oracle, pun, fable, proverb, apologue, personification, allegory. The myth and the fairy-tale are a species of symbolism that respond to the life of the child. The modern novel is a form of conscious symbolism in which life is expressed directly without the intervening of a deity, as in Homer. The mind in its imaginative thinking passes from symbolic art to classic and attains its highest activity in romantic art. Froebel understood the value of the symbol in education and made it the centre of his system. The mind gradually passes from a knowledge and use of the symbol to the word which reveals thought.

In the highest stage of thinking the mind recognizes itself to be the object, and the object to be what the self is. It is a process of thought thinking thought. Thought now grasps thought as the creative energy of the world. In Thought thinking the tree the mind seizes its genetic principle which is a manifestation of divine thought. The mind in thinking a manufactured article unifies itself with finite thought which brought it into existence. Objective thought is in the outer world;

subjective thought is in the mind. Thinking is a process of uniting the two into a bond of knowledge.

"Psychology is an evolution of the ego ever separating from itself yet ever returning into itself in larger and larger cycles till it embraces the universe."

In the onward sweep of thought in grasping the objective world, the mind passes through three stages of psychical activity, *i.e.*, understanding, ratiocination and reason. According to Kant there are two stems of knowledge: sense and understanding. By means of the category of identity, the understanding grasps the thought of the thing immediately without any process of reasoning. It probes into the inner nature of things and enters into the realm of law, force and cause. Under-
standing in its primary act apprehends
standing the object immediately. Apprehension presupposes distinction which is made up of abstraction and discrimination. In abstraction the mind thinks apart from the object some quality or property belonging to it. It does not grasp the genetic movement of the object but only certain external characteristics.

"Abstraction cracks the shell of externality by its separation, and opens the door to knowledge."

To understand an object is also to discriminate, to compare, to classify.

"In classifying objects the understanding is reaching out for their creative principle, for that which differentiates them, yet restores them to unity."

In classification the mind dwells in the realm of cause originating things, force creating cause and law manifesting both. Force manifests itself and perishes; law is the permanent amid the variable.

The combined movement of the mind in conception, judgment and reasoning has been called ratiocination. Identity is the category of the understanding but difference is the category of ratiocination. The ratiocinative process creates forms which are necessary for the expression of thought. The logical movement of thought is through concept, proposition and syllogism. The psychological movement is through conception, judgment and reasoning.

In understanding, the mind thinks a thing externally. In conception, the mind thinks the thing as to its genetic principle.

"The conceptive act of mind is creativity. . . . Conception is the germinal idea which divides within itself, expands and clothes itself with the details of its existence."

To grasp the conception of a poem is to see the poem creating itself through the mind's own productive energy. The organic elements of conception are the universal, the particular and the individual.

The generic usually expresses a physical process, the universal, a mental process. The universal has been defined as absolute identity—that which cancels all difference and otherness. When the universal passes out into the world it

does not lose its identity, but maintains itself in the particular. The universal is the creative principle formulating all existence. Conceptual thinking creates things in thinking them. It generates the thing anew as it was originally created by the divine mind in nature and by the finite mind in man's products.

The universal differentiates itself in the particular. It has within itself that inherent energy which creates species. The natural world as well as the spiritual has a tendency to particularize itself. The particular always returns to the universal to seek its origin. It is the law of both matter and mind that the particular returns to its universal source. If this law be violated, and the particular fails to be one with its creative energy, a conflict follows.

The movement of both mind and nature is from the universal to the particular, and from the particular to the individual. A poem has no reality except in individuality. However, every individual poem has for its generative process, the universal. It is at the same time a particular kind of poem—dramatic, lyric, comic, epic. It seems that the individual, particular and universal are not three movements of mind, but all form one total process. This triune process is found in the inorganic world, in organic life, and in God himself.

Conceptual thinking utters itself in a judgment which is separated into subject and predicate.

Thought is born in the judgment which is made up of three factors—the think-
 ing self, two states of consciousness and the spiritual connection of things. The idea *ink* and the idea *black* cannot form a judgment except through the unitary and abiding self and a truth common to both.

Judgment

Reasoning is a process of combining two judgments through a relation of a third. Every process in reasoning has a major premise, a minor premise and a conclusion. The major premise is
 a thought form which now unifies the
 syllogism with reason itself. There is a gradual evolution of thinking from sense to image, image to thought and thought to reason. According to Dr. Harris there are three stages of thinking: First, thinking objects; second, thinking relations; third, thinking the self-determining principle. In thinking a right angled triangle whose sides are three, four, and five feet, the senses first perceive the three lines, the understanding next demonstrates—
 “The square on the hypotenuse is equal to the sum of the squares of the other two sides.” Lastly, reason penetrates into the inner nature of mind and recognizes itself as the energy that brought the triangle into existence. These three stages of thinking have three corresponding doctrines of the world—sense-perception is atheistic; understanding, pantheistic; reason, theistic.

Reasoning

Reason is not only thought thinking thought, but thought recognizing itself as the creative energy

Reason of the world. Cosmic processes are not mechanical but rational and spiritual. It is the essential nature of reason to manifest itself in the objective world, and in the whole movement of thought. Reason is that which ratiocinates, that which syllogizes, and that which forms the rational basis of all existence. Thought may realize the meaning and purpose of the chair but reason not only grasps the creative process of the chair, but thinks its own process as the thought process constituting the chair. Reason is the great unifying principle of the world made manifest in natural law, the underlying and connecting basis of humanity, the organizing substratum of society, the creating force of the school, the connecting power in teaching, the unitary and abiding, causal energy in mind, and the fundamental basis of life.

Intuition is an immediate grasping of the totality of things. It is a mediating process between perceiving and thinking and seizes the universal as self-determined. I may perceive the chair, image it, think it, but to intuit it, I put it into the rational order of the world. It is by means of this intuiting process that the mind gains an insight into the cycles of nature and life. By means of the bone Cuvier could create the total animal. The animal was created out of his own inner consciousness through a clear grasp of the totality of the species. The intuitive reason in gaining a knowledge of the objective world re-discovers man's inner life.

"All external knowing must be likewise an internal knowing for that which knows is the ego, and that which is known, in order to be known, must be translated into the ego."

The mind in its final evolution intuits justice, the beautiful, the good, and the true as manifestations of the divine. The psychological process ends in the Divine Process, and education is made to harmonize with religion. Finite mind presupposes an Infinite Mind,¹ and finite thought is possible only upon the presupposition of Infinite Thought. Absolute Spirit is the ultimate reality of the world and is the origin and inspiration of every true thought, every pure emotion and every life tendency.

This discussion of the evolution of the mind is based upon the psychological doctrine of Denton J. Snider. Since the object and subject are unified in thought, this text makes all psychical activity a phase of the thought process. The purpose of psychology is to teach the student to recognize in the objective world a spiritual principle akin to his own soul, and to analyze the process by which that objective energy may become a part of his mental being.

The Law Illustrated.—The law of thinking is beautifully illustrated in teaching arithmetic. The evolution of the thinking process harmonizes with the development of the arithmetical process. In studying an object the mind first thinks quality which has been defined as the category of difference. Every quality or attribute of a thing is different from every other. In gaining

Arithmetic

a knowledge of an object the mind next thinks quantity which has been called the category of indifference. The other in quantity is similar to itself.

The mind first thinks the quality of an object, as a red apple. A higher power of mental activity negates or thinks away quality and thinks quantity. To think quantity is, therefore, a double mental act. Quality is seized by perceptive thinking and quantity, by thought thinking. In the former process the mind is dwelling in the realm of phenomenon or appearance and in the latter process the mind seeks the noumenon or the original causal energy.

To Think Number.—Number is not a thing; not a quality; not a figure; not a mental image of an object. Number is an abstract idea which arises in and through the activity of mind. Newton says:

“Number is the abstract ratio of one quantity to another of the same kind.”

John Dewey defines number as always expressing ratio. According to Euler:

“Number is the ratio of one quantity to another quantity taken as a measure.”

Dr. William T. Harris expresses the same fact by saying:

“Number trains the mind into the consciousness of the ratio idea.”

Here are three pieces of paper; one, two and four inches long. The two-inch piece compared with the four-inch paper is one-half. The four inch is twice the two inch. But comparing the two-inch

paper with the inch piece it is twice as long. Since the same quantity of matter is now called *one-half* and *two*, it is clearly seen that number is not quantity. It is as vividly shown that number is ratio, a relation. Number can be grasped by the thinking process of the mind only. Thinking is just that abstract process of seeing relations. Knowledge results from the establishment of relation. Number is a thought process consisting, however, of two phases; a sense element and a rational element.

THE CONCRETE METHOD.—Since the mind first thinks quality before thinking quantity and number, it is absolutely necessary for the child to begin with the concrete object. The abacus, blocks, balls, and pictures are close to the child's mental life. Correlated with the number lessons should be work in drawing, language and composition. The motor factor in education should be used in number work. The child should cut out pictures and figures in such a manner as to form problems in addition and subtraction. This "busy work" creates an interest in arithmetic and finally leads the child into abstract relations.

The child's social nature should be trained by having a group of children to measure and to cut out objects of different lengths. This also develops the child's quantitative faculty and by comparing the size of objects initiates him into a complete understanding of the number idea. The concrete must be dropped just as soon as the child's mind is able to act upon abstract ideas.

THE GRUBE METHOD.—The Grube method teaches the four fundamental processes of arithmetic together. It is based upon the concrete and aims to teach thoroughness. Grube proceeded upon the Pestalozzian principle that all knowledge is attained by the mind moving from the simple to the difficult and from the concrete to the abstract. This method of combining figures or digits cramps and mechanizes the mind and cuts off self-activity. It should be used only for variety sake and as an introduction to the Law of the Signs:

1. + and — should be used as they come.
2. $\times$ and $\div$ should also be used as they come.
3. $\pm$, $\times$ or $\div$ multiply or divide before adding or subtracting.

THE HEURISTIC METHOD.—This method develops the child's mental, motor, and social natures. It is the method of finding out, inventing, inspecting and experimenting. The table for dry measure is easily learned experimentally. Two pints of sand fill a quart measure. Eight quarts, a peck, and four pecks a bushel. The quantities are compared and the numbers clearly elucidated. It becomes a part of the child's life through his own self activity. The foot, yard, rod and mile should be actually measured and compared. The rules for square and cube-root should also be thought out experimentally by means of blocks. The Pythagorean theorem should be proved by actual measurement. The value of 3.1416 should be worked out in such a manner that it becomes an ever living principle in mensuration.

THE SPEER METHOD.—The fundamental principle of this method harmonizes with the universal law of human thinking. By comparing quantities the pupil is led to form judgments of relative magnitude.

“Number learning is number thinking, and rational instruction in number must recognize the nature of the process of number thinking.”

Number cannot be thought then by objects merely, but by comparing magnitudes and ascertaining relations. The child should compare the actual physical object to see relations, and secondly compare the images of objects. Before the child understands mathematical relations, he must be able to analyze, synthesize, separate and combine, and finally to think and to make judgments. The law of thinking is accurately illustrated by this movement of the mind in the number process from the concrete to the abstract.

Since thinking is an abstract process the child gradually arrives at that stage of mental equipment in which he is able to form perfect quantitative judgments. In thinking or making comparisons some constituent unit is used. This may be an inch, a foot, a yard, a mile or any definite quantity. Suppose a pupil compares a foot-ruler with a yard-stick. By the analytico-synthetical mental process, the one is found to be three times the other. He is thus taught the idea of three as a relation and not as a mechanical process. The child now does

for himself what the old method failed to do for him; namely, think number as an abstract relation. Counting now takes on a phase of mental activity. It is not a mere verbal naming of objects but an expression of the relative value of the quantity. Rational counting is a process of ascertaining the parts of a whole. The constituent must be seen as an exact quantitative relation to the whole. Forty yards cannot be comprehended only in its relation to the constituent unit one yard. As the thinking process develops more and more, the mind frees itself from all objective reality. The child must see the yard in so many concrete relations, that it finally realizes the yard as a relation. The mind must be gradually free from the particular and to think number as an abstract relation. This process should never be mechanical, memoriter, but always that of insight. Number thus becomes a means of self-realization. It is an agent by which the child develops its own self-activity. To learn number is to follow the law of thinking:

- The Thing
Is Its
Relation**
1. Sense experience and indefinite quantitative relations.
 2. Exact relations of physical objects.
 3. Seeing quantitative relations as images.
 4. Freeing the relations from the particular and mastering quantitative thinking.
 5. To think conditions and relations and to apply them to mathematical processes of thought.

The following quotations emphasize this method of number and show its relation to human thinking:

"Thought consists in the establishment of relations. There can be no relation established, and, therefore, no thought framed when one of the related terms is absent from consciousness."

HERBERT SPENCER.

"Thinking is discerning relations."

DR. MCCOSH.

"The thing is its relations."

G. H. LEWIS.

"Consciousness implies the recognition of likenesses and differences."

JOHN FISKE.

"The primary element of all thought is a judgment which arises from comparison."

FRANCIS BOWEN.

"All knowledge results from the establishment of relations between phenomena."

J. B. STALLO.

"We must practice in thinking, the constant object of all teaching."

CHARLES W. ELIOT.

XIV.

THE DEVELOPMENT

THE mind grows through certain immanent principles and relations which underlie experience and which constitute the very essence of pure thought itself. These abiding forms of thought lie at the foundation of all human knowledge by conditioning the thinking and knowing process. The thought process which conceives the order of nature is one in source and meaning with the order itself. If object relations were not thought relations and there were no common element between the two, then there would be no knowledge possible of the thing. In order for knowledge to be possible and the mind to develop there must be an activity of mind related to an inherent activity in the connected order of things. In thinking and knowing we recognize relations which underlie mental life and which translate experience into intelligible forms. In terms of the syllogism, the real is a relation; a relation is a form of consciousness; therefore, reality is rationality. The facts of experience are related and form a bond of union in and through a spiritual principle which knits things together, and knits mind and things together in the thinking of them. The fundamental principle which enables us to think the world, is identical to that which conditions the world.

Conditions
Of Growth

The human mind in thinking does not create objective existence, yet nothing exists for the thinking mind which cannot enter thought or become a thinkable reality. If fact, mind is possible only in unity with hidden relations out of which it grows and in which it exists. It has been well said that—

“Nature is a system of related appearances and related appearances are impossible apart from the action of intelligence.”

It is a self-evident truth that the outer world, as known and knowable, is a system of objects related to a thinking mind and related to each other through their relation to mind. An object exists only in relation to a subject Relational
Activity and when this relationship is wanting, the object for thought is wanting. The abiding self is the combining principle of human and phenomenal existence which weaves the world into thinkable forms. The mind in thinking searches for unity amid variety, for a fundamental principle embracing difference and reconciling opposing elements, and finally for the real unity of thought, the philosophic insight, and that rational knowledge which is necessary to reveal the true nature of the world without and the world within.

A thinking being realizes himself in that which lies outside of himself by sharing in the life and the thought of the literary, scientific, social and rational world which are means in attaining his true worth. The cosmic unities called laws of nature which the mind grasps in all scientific research, are coherent

System of
Relations

relations not foreign to mind but intrinsically mental in their nature. If mind be intimately connected with nature, if the student be rationally related to the facts of science, he is still more closely identified with human constructions and mechanisms. The relations in the violin and piano constitute their inner essence and are the product of the formative mind. The design of these musical instruments is the creative principle organizing the material into relations necessary for the production of musical sound.

It is generally thought that the reaper is made out of parts rather than the parts made from the reaper. The reaper is constructed of wheels, sickle, reel, canvas, chains, bolts, etc., but the fact is, these parts are built out of the *idea*—reaper. The universal creates the particular, the ideal brings into existence the real and what is now a machine was originally a pulsating thought. The truth is,

Reaper

the parts of the reaper are relations and the reaper itself is a system of relations. The sickle is found in the reaper and the reaper exists in the sickle. Relationship makes both reaper and sickle; the reaper makes the sickle as certainly as the sickle makes the reaper. In making a close study of the reaper we conclude that the canvas, sickle, reel, chains, bolts, etc., have no reality except in activity. It is through activity that these parts fulfill their purpose; activity means relationship. The sickle realizes its purpose only through activity, and its activity is possible only

in relation to the other parts of the machine. The relating activity which binds the parts into an organic unity is a thinking, creating mind. That which brings the machine into existence is a spiritual principle and to think the reaper is to think the mind externalized in the material and to ascertain the thought constituting its system of relations.

The Immanent Principles of Knowing.—The pedagogical problem is to determine the immanent principles of knowing and mind growth, and to trace out the underlying conditions of human knowledge. It is necessary to discuss the universal types of knowing and thinking which form the structure of intelligence. Samuel Taylor Coleridge classifies these types into three dual divisions, *i.e.*, subject and attribute, whole and part, cause and effect. From each division there arise certain subordinate principles which are also necessary to articulate experience.

In thinking a thing the mind splits it into substantive and adjective, or into existence and the property modifying it. The primary properties of a thing are those essential to its existence; extension and resistance; the secondary qualities are those given by the senses. In order to illustrate the relation of quality and object we analyze sugar into sweetness, whiteness and hardness. Object and
Quality These isolated attributes are our own points of view but the reality of sugar is found in their unity. Furthermore these qualities do not exist except in relation to each other; relation presupposes quality and quality is nothing apart from

relation. To get the truth of sugar its existence must be qualified ideally, as sweet, white, hard. Sugar has existence and content and the adjectives imply a separation of meaning from being. According to Anaxagoras a quality is an idea "cut off with a hatchet" from its reality. The sugar is known only through its qualities and its qualities are known only through the sugar.

In harmony with the thought of the poet-philosopher, quality and quantity and likeness and difference are derived from substance and attribute.

Quantity In thinking, quantity logically follows quality and the pupil passes from a study of the adjective to a study of number and mathematical science in general. In explaining the relation between quality and quantity Dr. Borden P. Bowne writes:

"Quantity refers to an order of likeness and difference within qualitative likeness, and the changes within qualitative constancy are quantitative."

Apples and wheat being qualitatively unlike can have no quantitative value. This fundamental principle of thinking is necessary to the pupil in number work and runs through the whole science of mathematics. Quantity may be considered from two angles of view; namely, continuous and discrete. The United States, *E Pluribus Unum*, is an example of continuous quantity, and a bushel of apples, discrete quantity. In the former, emphasis is put upon the connecting bond of the parts and

in the latter, upon the isolated conditions of things. Number exists neither in quantity nor objects but is wholly relational in nature. The mind establishes the constituent unit and the numerical relations are ascertained by a process of comparison. An exhaustive analysis of number would include a study of the different systems of notation and the transposition of the scale, as the decimal to the binary and the octary to the duodecimal.

Growing out of a study of an object and its attributes are two necessary modes of thinking—likeness and difference. These molds of consciousness are the essential factors in human understanding and take into consideration discrimination and comparison. As noting likenesses and differences is purely a thought process, pupils should be thoroughly drilled in this particular movement of the mind. In arithmetic they should see the likeness and difference between a triangle and rectangle, cone and cylinder, prism and pyramid, cube and parallelepipedon, etc. In geography they should be drilled in discerning the likeness and difference between an isthmus and a strait, a desert and a plain, and should compare the outlines, products and peoples of different countries and should study geographical facts in general from the standpoint of comparison. The teacher in physiology should insist that pupils understand the likeness and difference of veins and arteries, inspiration and expiration, secretion and excretion, etc. Grammar should also be taught in

Likeness and
Difference

accordance with these immanent principles by noting the likeness and difference between the different kinds of sentences, the different parts of speech and figures of speech, etc. History should be taught by comparing great men, great events, great periods, etc.

The second coördinate group of immanent principles in thinking is whole and part. The mind in thinking a thing grasps the object as an individual

Whole

And Part

whole, analyzes it into its constituent attributes and parts, and finally reorganizes these elements into the original whole. Attributes are inclusive, parts are exclusive; the former are inherent in the thing, the latter are the component elements making up the thing. Some fundamental principle of division should be determined upon before a thing is thought into parts. After the basis is established the parts should be thought in order completely. The Bird of Paradise has a partitive as well as an attributive existence. The bird may be thought anatomically into head, trunk and extremities, or physiologically into the functions necessary to its existence. Pupils should be drilled in analyzing wholes into parts and in synthesizing parts into wholes. This is an essential form of thought and enters largely into all school studies. Closely connected with whole and part is

One and

Many

another dual type of thought—one and many. This dualism of thought would ask the questions—Is the school one or many? Is the world one or many? These are pertinent, pedagogical questions and lead the student into a

discussion of monism and pluralism from both the educational and world standpoint.

The highest dual form of thought is cause and effect which explains the antecedent condition of things. There are certain invariable sequences of phenomenal and educational facts that Cause and
Effect depend upon a primal principle for their existence. There are two kinds of causes known in human thinking—efficient causes and final causes. Final cause sets forth the end or aim of an action. Efficient cause brings about certain changes which realize an end. In a grain of corn there is a causal energy which purposes an ideal corn-stalk. The soil, moisture, sunlight and air constitute the efficient cause which has the power of converting the original force into a perfect plant. In the domain of human activity final cause governs efficient cause. The final cause of the Panama Canal originated in the fertile minds of our great statesmen. The efficient is seen in the agencies, pick, machinery, laborers and money which have the power of accomplishing the final purpose. Dr. William T. Harris writes:

“We notice two important steps in self-activity; the first, the formation of an ideal or purpose, and the second, the transformation of the real into the ideal.”

The reign of law has had a tendency to destroy the reign of purpose. Causal energy establishes a uniformity in nature called natural law. Things exist through mechanical and evolutionary forces

or through purposive processes. The educational world is purely purposive while the physical world is purposive and developmental. To think the purpose of the school or the world is to gain a knowledge of their hidden power or origin. To think the purpose of a hat is to become conscious of the reason for its existence. The hat is the objectification of the self and is not wholly material nor wholly thought, but a concrete unity of the two. To study the hat as a material thing accords with the first phase in the development of thought, but to study the hat as a thought process is to enter the second stage of mental growth. The highest stage of thought activity takes cognizance of the duality in unity and attains the true knowledge of the object. It is a valuable exercise to trace out the thought found in manufactured and natural objects. The evolution of the hat process may be traced out in the following manner. Some one conceived that a covering for the head would be beneficial in protecting it from heat and cold. This individual thought out a condition in which the head could not be exposed. He contrasted the real condition with the ideal and lastly, created the thought of the hat which takes on external form. The spiritual hat and the material hat form a concrete unity called "hat." To study the eye as an organ of sight is to retrace purpose in the Infinite Mind. This is a more difficult process and the thinker must choose for himself the evolutionary or the teleological doctrine of the world.

It is impossible to think a thing without thinking it as fixed or changing. The house must be thought as it now exists or in the process of becoming through a causal energy and a material means. *Old Ironsides* may be thought, as she now lies in Boston harbor or she may be thought in the process of construction in 1795. To think a thing as fixed is description; to think a thing as changing is narration. We describe *Old Ironsides* as she now is and narrate the process of her construction. Again, every individual is derived from a universal, and every universal is housed in an individual. The table is derived from some universal idea or conception of table. If the individual is destroyed the universal may create others indefinitely. If the universal ceases to be then there is no individual. We gain a knowledge of the individual through sense perception, but the universal is known only through thought or reason. The individual that is first perceived is finally grasped with the universal in it. The mind passes from the individual to the universal and from the universal back to the individual.

Fixed and
Changing

Individual
And
Universal

The when and the where are rooted in the very nature of thought and knowledge, and are indispensable types of mental activity in all processes of knowing. Nothing can exist except in time and place, and nothing can be thought except at some time and at some place. These two forms of consciousness lie at the founda-

Time
And Place

tion of all biography and history, and are the essential questions of inquiry in geology and other sciences. These patterns of thought are used daily and unconsciously in all school work, and their value is not appreciated and understood by the ordinary thinker.

In the development of the educational process, subject and object are twain—yet resolvable into each other. Unless a poem can be resolved into mind terms it cannot be learned and has no value in the education of the individual. Knowledge is possible only in the unification of the mind with the thing the mind thinks. All thought moves between subject and object which are essentially distinct from each other yet in their unity lies all knowledge. No thinking is possible without an idea and an idea implies that there has been a separation made between the object and its meaning. A judgment adds an adjective to an object and qualifies it ideally. In thinking we arrive at the nature of the object and find it to exist, in the last analysis, in a thought process.

Every appearance involves a reality and every phenomenon, a noumenon or thing-in-itself. If this dualism is denied then one element resolves itself into the other. The appearance of a work of art belongs to its reality, and its reality is grasped, not sensuously, but through processes of thought. Nature is the appearance or manifestation of the Absolute which Spencer says is unknowable, but which Tennyson says is attained

not by reason but by faith. The objective school is the appearance, but its reality lies beneath the phenomenal existence in a spiritual unity. The mechanical means used in teaching represents its phenomenal side while soul unity is the real teaching itself.

Activity is a process of self-realization and is the power which transforms the real into the ideal. When the *is* is changed to the *ought-to-be* the individual has acquired a fresh adjective and a Real
And Ideal new increment of life. It is through activity that the pupil attains the consciousness of his own freedom.

Washington Monument.—To make a summary of these immanent principles of knowing, a brief study is made of the Washington Monument. The student first thinks it as an *object* of admiration possessing adamant qualities. The *quantity* of material used in its construction was donated by the States and different nations of the world. It is 555 feet high and is the tallest shaft in the United States. It may be compared to Bunker Hill Monument; there is a *likeness* in structure and purpose, but a *difference* in size and commemoration. In thinking the Monument the mind first grasps it as a *whole* and then analyzes it into its constituent *parts*. The *many* stones are synthesized into *one* shaft and are transformed into knowledge and patriotism. The spirit of American patriotism is its *final cause*, whereas, the rock and other material constitute its *efficient cause*. The *means* used in the construction of this Monument are insignificant compared with the *purpose* which it commemorates.

The Monument may be thought as fixed or as changing; *changing* from its ideal to its realization, or *fixed* definitely near the Potomac River. Scientists tell us that its inclination varies with the seasons. The *universal* Monument conceived in the minds of the American people is housed in an *individual* structure which perpetuates the memory of George Washington. Washington City is naturally the most desirable *place* for its location. The elements of *time* considered in a study of the Monument are the laying of the corner-stone by President Polk, July 4, 1848, the placing of the capstone December 6, 1884, and the dedication February 21, 1885. The Monument is an *object* of inspiration and patriotic knowledge to every thinking *subject* struggling to realize liberty and freedom. Its *appearance*, although grand and sublime, cannot be compared in importance with its ultimate *reality*. The Monument in its solemn stateliness is a national incentive in transforming the *real* American into an *ideal* citizen. To make an exhaustive study of these fundamental principles of knowing is to attain a complete knowledge of the Monument.

The individual finally finds himself reflected in the Monument and transforms it into a type of his own life. As Goethe puts it, the thinker uses the individual to set forth some universal truth. He sees back of the material thing a spiritual law which is a reflection of his better self. He finds himself in the Monument and translates the Monument into himself. He is now

on the borderland between the ideal and the real and at last translates himself into higher and nobler life. Such a study of an object stirs up the pupil's emotional nature and arouses within him a feeling of effort to grow in thought and life. His total life is made to feel the pulse-beat of the world and he is inspired with all that is true, beautiful and good.

To Think the Class.—An individual object cannot be thought without seeing it in relation to a class. The class is ascertained from the world of reality by observation, comparison, contrast, abstraction and generalization. Classification is an important element in mind development, for we are able to master nature only by binding it into classes. The content of Content
And Extent a class is the sum of the attributes found in the individual composing it. The extent of a class is the number of individuals found in the content. It is impossible to think the content of a class without thinking the extent. Content and extent are dynamical relations. The greater the content the less the extent, and *vice versa*. A good, mellow, red apple has greater content, but less extent than a red apple. There is an exact qualitative and quantitative relationship existing between content and extent. To think the qualitative is definition; to think the quantitative is division. One is connotation, the other, denotation; one, intension, the other, extension.

Principle of Definition.—The process of denoting the common qualities belonging to a class

is definition. Every definition has a major genus and differentia. In the definition—A triangle is a polygon of three sides, “polygon” is the major genus, and “of three sides,” the differentia. Every logical definition unfolds the essence of a notion by using a universal and particular term. It is a process of thought by which the mind unifies the individual and universal. It should be adequate, affirmative, perspicuous and not tautological.

Jevon gives the following rules:

1. A definition should state the essential attribute of the species defined.

2. A definition must not contain the name defined.

Rules of
Definition

3. The definition must be exactly equivalent to the species defined.

4. A definition must not be expressed in obscure, figurative or ambiguous language.

5. A definition must not be negative where it can be affirmative.

Principle of Division.—To think the quantitative, the extent of a class, is division. It is a process of thinking unity into diversity. The mind cannot think extent without thinking content. As the principle of division is so important in teaching, in outlining subjects, and in classifying facts, the following rules from Minto are given:

1. Every division is made on the ground of difference in some attribute common to all the members of the whole to be divided.

2. In a perfect division the subdivisions or species are mutually exclusive.

Rules of
Division

3. The classes in any scheme of division should be of coördinate rank.

4. The basis of division should be an attribute admitting of important differences.

To strengthen the mind in this form of thought, the pupil should be drilled in making outlines and systematic subdivisions of an object. An outline is the arrangement of notes in logical order. It is valuable in making studies systematic, in cultivating the power of classification, in creating interest, and in aiding in original investigation.

Outlining

PRINCIPLES IN OUTLINING.

1. No heading without a coördinate topic.
2. Coördinates must be placed in a vertical column.
3. Subordinates are placed underneath and to the right.
4. Themes are not indexed.

The different methods of outlining are the brace, position, letter, tabular, numerical, composite and exponential. The following is an example of the exponential system of outlining:

- | | |
|--|---|
| <p>FOOD.</p> <p>1¹. STARCH.</p> <p> 1². Changed in the mouth.</p> <p> 2². By the saliva.</p> <p> 3². Into grape sugar.</p> <p> 4². Absorbed in the mouth
and along the alimentary
canal.</p> <p>2¹. ALBUMEN.</p> <p> 1². Changed in the stomach.</p> | <p>2². By the gastric juice and
pepsin.</p> <p>3². Into albumenose.</p> <p>4². Absorbed in the stomach.</p> <p>3¹. FATS.</p> <p> 1². Changed in the duodenum.</p> <p> 2². By the pancreatic juice
and bile.</p> <p> 3². Into an emulsion of fats.</p> <p> 4². Absorbed in the intestines.</p> |
|--|---|

The pupil should study by outlining rather than by an outline. We are told that science is knowledge properly classified. Outlining assists the pupil to see relations in subject-matter. It assists the mind

in so classifying the facts of a subject as to make it more easily learned. The logical order of the subject should be made to fit to the psychological order of the growing mind. Outlining is a process of adjusting subject-matter to mind. The thought in the thing is made to correspond to the law in the mind.

The Logical Syllogism.—There is nothing that will assist the thinking mind in its growth and development more than a study and application of the logical syllogism. The syllogism is a movement of the mind from the individual through the particular to the universal, or from the particular through the individual to the universal, or lastly, from the individual through universal to the particular. The first movement is called deduction, the second, induction, the third, identification.

DEDUCTION.

All inventors labor diligently,
Edison is an inventor,
Therefore, Edison labors dili-
gently.

INDUCTION.

Edison is an inventor,
Edison labors diligently,
Therefore, all inventors labor
diligently.

IDENTIFICATION.

An inventor labors diligently,
Edison labors diligently,

Therefore, Edison is an in-
ventor.

ENTHYME.

All inventors labor diligently,
Therefore, Edison labors dili-
gently.

SORITES.

Hoosiers are Americans,
Americans are men,
Men are rational animals,
Rational animals have minds,
Therefore, Hoosiers have
minds.

The syllogism consists of a major premise, a minor premise and conclusion. The syllogisms are organically related. The three movements of the

mind are interrelated processes. Each syllogism depends upon, and is related to the other two. An enthymeme is a syllogism with one premise unexpressed. The common sorites consists of a number of syllogisms so combined that the predicate of the first premise becomes the subject of the next until finally the predicate of the last is predicated of the subject of the first.

Syllogism

The Syllogism in Thinking.—The mind first recognizes an object by the second figure of the syllogism (S is M, P is M, therefore, S is P). This is an act of apperception which takes place through some common mark that belongs to both the object and the class. As soon as an object is recognized by one of its marks, sense-perception uses the first figure of the syllogism (M is P, S is M, therefore, S is P) to reinforce the first act of the mind and to look for other marks which previous experience declares to belong to the object. In this figure of the syllogism the individual enlarges his experience through the stored-up knowledge of the race. By means of the third figure of the syllogism (M is P, M is S, therefore, S is P) the mind grasps classes, species, genera, and universals. This form of the syllogism gives definition because it unites the universal with the individual.

Figures of
A Syllogism

Hegel defines the syllogism as the unity of the judgment and the notion. He shows that every form of life is a syllogistic process. His universal is the creative energy found in species. We do not construct a syllogism, it

Definition

really constructs us. It traces out the process of the Absolute as manifested in the world. The world is a manifestation of the universal by means of the particular in the form of a concrete individual. It is the nature of thought to bind these three ideas into one syllogistic process. Thought or reason has an inherent tendency to express itself in the form of a syllogism. The underlying process of both nature and mind is a syllogism.

The Development Illustrated.—The development of the thinking process may be illustrated by a study of method in geography. Geography is a study of the earth in relation to man.

Geography A study of the earth may be geology, mineralogy, paleontology, chemistry or astronomy. A study of man may be biology, physiology, biography, history, ethnology or anthropology. The earth studied in relation to man is geography. To study corn, wheat and cotton is botany. To study these in relation to man is geography. To study a fact in geography is necessarily a dual act. It must be thought *per se* and in relationship with man. The geographical is not geological, meteorological, zoological, botanical, historical, political, but a study of all these facts in relation to man's life, development and higher existence.

Geography is divided into—

ACADEMICALLY SPEAKING.

1. Home Geography.
2. Elementary Geography.
3. Physical Geography.
4. Physiography.

PROFESSIONALLY SPEAKING.

1. Observational Geography.
2. Representative Geography.
3. Descriptive Geography.
4. Rational Geography.

The academic division is based upon natural relationships. The professional classification is based entirely upon mind processes. The teacher must understand the logic of the subject and the psychology of the mind; world relations and mind relations.

OBSERVATIONAL GEOGRAPHY.—The Committee of Ten says the purpose of observational geography is—*a*. To develop the power and habit of geographical observation; *b*, to give the pupil true and vivid basal ideas; *c*, to arouse a spirit of inquiry and a thirst for geographical knowledge.

Pupils should be taken into the woods and fields and led to observe hills, valleys, rivers and agencies producing changes, such as floods, winds and rains. Children should also have an opportunity to study humanistic geography such as docks, steamboats, railroads, interurban traction lines, etc. By observation and experimentation pupils may notice the daily rotation of the earth on its axis

(Foucault Experiment) and the change ^{Perception}_{To Conception} of the sun during the different seasons.

Pupils should be taught to notice the changing of the stars, the Pleiades, the Dipper, Jupiter, Venus, Orion, etc., and to note the phases of the moon.

Encourage each pupil on a geographical excursion to bring in some product of nature and to study its geographical significance. Geography should be a natural outgrowth from nature study which is the child's first outlook on his natural environments. It is a transition from the perception of the

real to the conception of the ideal. It is a process of thought thinking thought as manifested in the outer world. There are just two factors in thinking geography, the world without and the world within. It is a process of translating the thought of the Infinite Mind into the thought of the finite mind.

REPRESENTATIVE GEOGRAPHY.—After impression comes expression; after observation, artistic representation in the form of models, maps, sketches, charts, etc. An impression becomes a fixed product through expression. The impression is made more vivid and clear through representation. The child is now induced into the inner life of a map and to think its creative energy. He makes a realistic sketch of what he saw in observational geography. The first effort at map drawing should be topographical and free-hand. The form of land in three dimensions brings into use the moulding board. Maps should finally be drawn to an exact scale. This work bridges the chasm between geography and surveying and civil engineering.

DESCRIPTIVE GEOGRAPHY.—The pupil is now directed to a study of the observations and representations of others. No student can observe all the surface of the earth and hence must study the maps and representations of expert geographers who have made a life study of the geographical process.

Descriptive geography gradually merges into narrative geography. The fundamental geographical process is change. The expert geographer looks

into these processes of nature and notices changes and cycles of activity. The essential process in geography is evolution, a becoming, a change, a cycle, a return-to-itself, a force and energy which is constantly struggling for a more perfect cosmic realization.

RATIONAL GEOGRAPHY.—The movement of mind in geography is observation, representation, description, and rationalization. At this stage of geographical thinking cause and effect relations should be carefully studied. The student is now prepared to investigate Laplace's Nebular Hypothesis. It would also be interesting to look into the various philosophical theories of the origin of the world, as water, fire, air, and the unlimited. Rational geography is analytic, and seeks to explain the classification of geographical facts and the causes of geographical phenomena.

The thinking process is developed by the mind coming into contact with the objective world as manifested in geography. Geography develops perceptive thinking, memory thinking, imaginative thinking, and lastly, thought thinking. Rational geography is a study of the thought processes as embodied in nature and interacting upon man. It investigates the thought in the thing and attempts to adjust it to the growing mind. The fact in the thing may be a volcano with its crater, lava, cinders, gases, cause, number, classification and location. This method in the subject is to be adjusted and harmonized with the method in the mind.

Thinking Developed in Physiology.—While the thinking process may be developed in studying any subject, it is especially interesting to trace the growth of thought power in learning and teaching anatomy, physiology and hygiene. To study and

Human
Body

think the human body is to discover the inner force of the human constitution. The ultimate objective categories, force, cause, law, etc., are made subjective forms of thought. The mind grasps a knowledge of anatomy by coming in contact with the thought found in the human body. The thought in the organism is a common term to the thought in the mind, and hence is thinkable, knowable, because there is something objective to which the mind can unify itself. The true scientist must be psychological and see in all objective reality a thought process. The final purpose in science is to trace out the Absolute Idea which is not only the origin of all human beings, but of all facts, principles, forces, causes and laws of existence in general.

THE SCIENCE OF OTOTOLOGY.—To understand how the mind grows and develops in studying the science of physiology, an intense study is made of the human ear. Applying the categories of thought, the ear is divided into pinna, tympanum and labyrinth. The parts of the pinna are helix, antihelix, tragus, antitragus, concha and lobus. The tympanum is divided into the ossicles, (malleus, incus, stapes, orbiculare), membrani tympani, openings, and muscles. The labyrinth is analyzed into vestibule, otoliths, semicircular canals

Ear

(perilymph, endolymph), cochlea (fenestra rotunda and fenestra ovalis, modiolis and organs of Corti) and the auditory nerve (cochlear and vestibular branches). The first movement of thought reveals parts and the second mental movement interprets attributes.

The thought-relations constituting the ear also include a study of its form, size, color, resistance, protection, cause and effect, time and place, likeness and difference, and purpose or function. The function of hearing has its purpose deeply rooted in human life. It is impossible to think function without first thinking the thing to functionate, and hence a study of anatomy should precede a study of physiology. A knowledge of hygiene is necessary to understand how the parts function in a healthy condition.

The function of the pinna is to convey sound by conduction and convection to the auditory canal. There is also an added meaning or thought in the ridges and furrows of the external ear.

The design is to give greater exposed surface and to receive more accurately the vibrations from various directions. The thought of the auditory canal is to give greater intensity of sound and to afford protection to the membrani tympani. This membrane receives the vibrations and transmits them to the auditory nerve by means of the chain of bones. A further design is seen in the function of the Eustachian tube which equalizes the atmospheric pressure on both sides of the

Design
In Nature

membrani tympani. The purpose of the internal ear can be understood only by a careful study of means to ends. It is thought that the cochlea determines the pitch and the semicircular canals the direction from which sound comes.

A close study of the mechanism and function of the ear reveals the fact that it is a delicate apparatus to aid the individual in securing spiritual freedom. Every part, every attribute, every function is rooted in a divine purpose which controls and works out the design of the whole organism. The teleological view supplemented by the developmental hypothesis is the true explanation of anatomical parts and physiological processes.

Hygiene should as logically follow physiology as physiology should be based upon anatomy. To reverse these subjects as found in some text-books is to contradict the laws of human thinking. For the ear to fulfill the purpose of its existence, it must be kept in a healthy condition. Earache, otorrhœa, otalgia and other unnatural conditions of the ear tend to subvert the purpose or original design of the ear. Hygiene is a necessary study from a physical point of view, but it is doubly important in understanding the great purpose running through the whole organism.

To think the ear is not merely to know its structure, function and health, but to gain a clear idea of its design, law, purpose, which are infinite in their origin. The mind in its process of develop-

ment parallels the eternal purpose of the organism and searches out those eternal truths coextensive with its origin. It is easy to understand how thought thinks thought in human constructed knowledge but to enter the workshop of nature and trace out and understand creative principles is a more difficult problem. The design of the ear is to assist in spiritual freedom.

Creation
And
Evolution

The ultimate problem in thinking the ear is to gain a knowledge of the creative purpose of the organism and to follow this final cause through processes of development. Once more we are brought to the fundamental conclusion that the mind in its growth and development parallels the growth and development of natural objects.

A final knowledge of the automobile is arrived at by ascertaining the creative idea and then tracing that thought through its various stages of evolution. To gain a final knowledge of the ear, the mind first seizes the ear idea and then traces this thought down through the developing human being until it attains its freedom in and through the organism studied.

The Highest Psychological Development.—The highest function of the intuitive reason is to commune with the Divine Process. There is a divinity in the world which shapes our ends and which we must firmly grasp by a study of its outer manifestation in art, science, literature and prophecy. The true, beautiful, and good are expressions of the divine order of the world which must flow into our

The Divine
Process

lives if we would realize our final destiny. The human soul in the course of its development finally catches a glimpse of the Divine Ego. The student passes through the different psychological processes until he arrives at a knowledge of the universal, eternal process of the world. The educational process, the psychological process, the teaching process lead up to a knowledge of the Divine Process. There is a parallelism between education, psychology and religion and the unity of the world, and knowledge is proclaimed. The educational consciousness becomes the religious consciousness in and through the teaching consciousness.

XV.

THE DOCTRINE

THE true doctrine of thought is based upon the law of mind activity and upon those immanent mind principles underlying thought and thing. The movement of the mind in thinking parallels the content of things to be thought. Thinking is a spiritual activity in which the soul breathes in the realm of ideas. The function of the mind is to think, and the function of thinking is relating, unifying, "putting things together." To think a thing is to unify the thing process with the mind process, to transmute the content of the thing into the constitution of the mind and to realize through this interaction knowl-
Thinking
edge. This doctrine teaches that thinking is possible only in relation of the thinker and the thing thought, and to examine the thinking process is at the same time to examine the process of things which the mind thinks. In other words, "mind and matter, subject and object, thought and being are related phases of the same underlying principle which unifies the two seemingly contradictory principles. That which ties the two together is a spiritual substance which at the same time is the absolute principle of the universe."

The Mysterious Unity.—The unity between mind and what it thinks, is not mechanical, not

chemical, but organic. A mechanical unity consists in putting things together by laws externally imposed, as in the chair or reaper. A chemical unity is a merging of parts into a new whole differing from the original, as hydrogen and oxygen forming water. An organic unity is a union by virtue of an inherent energy seeking the end for which the organism is created, as plants and animals. The purpose of the organism is to realize itself from within, but the purpose of the mechanism is to realize itself from without. An organism grows, a mechanism is changed. Thought is an organic process of mind identifying itself with the thought in the sentence, in the poem, and in all lessons studied.

An organism, as the heart, maple, robin, cannot exist in and by itself, but must exist in and through what is other than itself. Thought cannot exist in and by itself but always exists in and through other things than itself. It is the very essence of thought to contain within itself a living relation to things. Reality without and thought within are opposite poles of the same thing and are at heart one. This same thing is the universal reason which pervades all thought and all things, and forms all existence into a rational coherent system through a common spiritual principle. The human mind and the real world must work together harmoniously if thought is to be identified with the thing. If knowledge be possible and the world is to reveal itself to the thinking mind there

Relativity
Of Thought

must be an affinity between the mind and what it thinks. In thinking a thing the mind identifies itself with the content of reality and never with the thing itself which is said to be unthinkable. In connection with this doctrine we hear such expressions as, the external is outside of the mind and hence outside of knowledge; reality is richer than thought; knowledge is unequal to reality.

Every thing that exists was originally a human or divine thought. This thought is now manifested in nature, man, art, law, ethics, education and religion. All being is thought to the Infinite Mind and may be thought to the finite mind provided it is sufficiently developed to think it. If a thing cannot be thought it does not depend upon the nature of the object, but upon the capability and development of the mind. The thought which we find in nature is not created by the human mind. The fundamental meaning Mind
And Nature of nature is discovered and ascertained to be a system of relations corresponding to our own rationality. The essence of nature is the essence of mind. The meaning of nature is the meaning of mind. It is the function of science to trace out the thought element in nature and organize it into thinkable forms. The modern thinker is now teaching that things are related to thought and thought is related to things. We are gradually coming to the belief that the universe is an organic unity constantly evolving and working out its secret potencies. If this doctrine be true, nature, mind and

God are ideas which belong to a unitary system of knowledge.

We are taught by Prof. Royce that the world, whatever it is, consists of such stuff as ideas are made of. Matter is a mass of coherent ideas; time and place are ideal; the world is a universal mind.

Idealism If this idealistic doctrine be true, then the mind is able to think the world, but if it be false, the world is unknowable and has no meaning to the mind. If the world be not ideal, then science which is a mental interpretation of the world has no meaning nor value. If the world be ideal, its essence is thinkable by some mind, and may be thought by any mind having sufficient capacity. Since this is a world of a universal mind and extends beyond our particular consciousness it cannot be fully grasped by the finite mind.

Thought Determines Thing.—Things exist for us only as thought constructs them and builds them up in our intelligence. Thought does not create things *per se* but finds in them a rationality which determines what they are and makes them an object of knowledge. While Spencer would say the outer world molds the mind, Kant affirms the mind molds the outer world. Fichte makes knowledge an activity of the ego directed toward things. In these systems of thought there are two organic elements which enter into knowledge—thought and thing. It is impossible to think pure subject or pure object for thought in its real nature is a relation of the two. It is certainly a true doctrine to

say that the subjective world was developed out of the objective world and that things are what they are through a thought process. It is as impossible for an individual to create new ideas apart from objectivity as to create new atoms, for ideas are essentially related to reality. They do not exist in the mind spontaneously but are the expressions of the real nature of things. When we examine closely the relation of thought to thing, of subject to object, we find the unity expressed by these correlatives absolutely indivisible. We can distinguish subject from object, yet we are not able to divorce them. The thinker cut off from the object is unthinkable; self is possible only in opposition to the non-self; spirit is known only in contradistinction to the non-spiritual; thought and thing are inseparable in the knowledge process.

Spencer makes the thing a persistence in consciousness, and we might add a persistence of mind in determining the thing. The thing does not determine mind but mind determines the content and process of the thing. The Persistence
Of Mind eyeless fish in the Mammoth Cave was not created by thought, yet it did not exist as a species from the standpoint of knowledge until interpreted by some human mind. The object apart from the mind or the mind apart from the object may constitute potential knowledge but actual knowledge is found only in their organic unity. The whole body of knowledge taught in our schools was determined by the mind making the thing series

harmonize with the thought series. If the outer world could not be made to harmonize with the inner world of thought, if these two series could not be made to coalesce, if thought and thing could not be unified, then knowledge is impossible.

Thought and Thing Unified.—Thought not only determines the thing but before knowledge is possible it must unify and organize it into mind terms. Subject and object are made one through a universalizing self-consciousness which abides in things and thought. Thought and thing must be distinct yet united before knowledge is possible. Dr. Baillie has well said, The *being* of the object is the content of the subject, the process of the subject is the life of the object. In reason thought and thing are consciously one in form and content. When the law of thought parallels the law of things the resultant is truth. All knowledge presupposes a union of thought and thing through a common principle. Thought cut off from thing is empty and thing cut off from thought is blind.

Thought finally returns upon itself and thinks itself as the generative principle of all things. The deepest doctrine of the thinking process lies in the fact that thought which was once estranged is to be reunited. The thinking mind now recognizes its own process in the processes objective to itself. This is the paradisaical state of unity between the thinking mind and the world to be thought. The cosmic cycle unfolds into the spiritual cycle and the thing proc-

Thought
Returning to
Thought

ess becomes the thought process. It is the principle of the human soul to struggle to attain the universal ideal around the charmed circle of reality. The idea in attaining its self-realization turns a complete summersault. It first existed in the divine mind, then descended to unconscious nature, awoke to self-consciousness in man, realized its meaning in the family, society, school and state, and finally through art, religion and science makes a complete cycle enriched and adorned. In this panoramic movement the mind interprets the world as a process constantly struggling from a vague whole through differentiation to a definite whole. The creative spiritual force running through the world gives it continuity, makes it thinkable, and is the source of all human knowledge.

The Knowledge Process.—The fundamental process in education is the unification of thought and thing and the attainment of truth and knowledge.

“Truth means that knowledge which embraces its object upon all possible sides and in all of its possible relations as the complete expression of the eternal reason which underlies it.”

As to the origin of knowledge empiricism insists that knowledge is due to experience only; rationalism maintains that the source of all knowledge is in the mind; the critical school sets forth the doctrine that the gross materials of knowledge are derived from the senses and the formal elements of knowledge have a rationalistic origin. As to the nature of knowledge realism lays stress upon the objective world while idealism emphasizes the world

of consciousness. The most conclusive doctrine of knowledge maintains that there is a spiritual principle in man which is one with the spiritual principle of the world. Knowledge has its source in the unification of the thinking mind with the law, order and rationality of the world. When the inner meaning of the world has been ascertained it turns out to be law, and law is ideal, representing not merely the thought in the mind but the real principle itself. Knowledge is the result of thinking and—"thinking," says Emerson, "is the hardest task in the world." When Sir Isaac Newton was asked how he made all his wonderful discoveries he replied, "By thinking." Knowledge is rooted in the thought process and grows in proportion to the self-activity of the individual.

FACTORS IN KNOWLEDGE.—To think is to realize an ideal but the mind cannot attain its self-realization until it hitches itself to an object. Thinking brings out the new birth and develops what is best and noblest in us. Browning says:

"If our reach did not exceed our grasp, what is heaven for?"

The thinking process attains ideals, makes them real, and the basis for other ideals. The soul craves the other world, for in this other-
Soul- Growth ness it seeks to attain itself. Soul-growth is a process of uttering self, and outerizing self in the world objective to itself. The poet again asserts:

"Unless above himself he can exalt himself, how mean a thing is man."

To think is to reach down below the surface of things, and to connect their ultimate reality.

Dr. Campbell in the "Evolution of Plants" indicates that the life-processes in plants and animals are the same. He states that the scientific biologist recognizes the fundamental likeness in the structure and the functions of plants and animals. Beneath the phenomenal world there is ultimate unity in the noumenal world. It seems that every individual thing can be traced back to some universal truth.

Universal

The individual Model School has as its ultimate reality the universal ideal of school in general. The idea school creates not only this individual school, but has the power to originate any number of schools. Should the Model School be blotted out of existence and the State Normal of which it is a part be annihilated, the idea school has within itself a causal energy which would produce other schools. The real school is not made of brick and mortar, but is born out of the idea of developing the spiritual nature of the child.

Model
School

The geographical world is an object of sense-perception. Pike's Peak is an individual object having form, size, location and other essential attributes. The ultimate idea of this mountain is found in the internal force and energy of the earth. This force or energy is found to be law, and law is reason, and reason is the ultimate reality of all things.

Every event in history grows out of some institutional idea which has for its purpose, the freedom of the race. Beneath the multiplicity of ideas in history there is an ultimate idea of spiritual freedom. The settlement of Georgia is an individual fact, but its ultimate reality is the freedom of poverty-stricken individuals and those imprisoned for debt. The cotton gin is an individual event in history but has for its universal principle the amelioration of the industrial life of the nation. Harvard University is a noted institution of learning, and has its origin in the universal idea of John Harvard who bequeathed his library for the purpose of the education and freedom of his countrymen. Plymouth church in Brooklyn, is a renowned Individual institution for the promulgation of truth In Universal as set forth by Beecher, Abbott and Hillis. This small individual church has been a power in spreading the gospel of righteousness to mankind. The political idea in history has had such a wonderful influence in developing the rationality of man that a special paragraph is given to the doctrine of the evolution of government which parallels and harmonizes with the doctrine of thought itself.

The Doctrine Illustrated in Civics.—Every individual state, every individual nation, every individual government, every individual law grows out of a universal principle of reason. Reason is the substratum of all governmental processes and the creative energy of all civic relations. It originates

states, formulates nations, establishes governments, and creates laws. According to a statement of Hegel:

"The state is the divine idea as it exists on earth: Law is the objectivity of spirit."

Rationality is a necessary substratum of law and government and is externally manifested in the state. The world-spirit uses the state, the nation, the government as a means to rational freedom. A state is a phase of the universal spirit and a link in the great chain of human freedom, and contains a potential germ capable of infinite development and progress. The active energy of spirit transforms states, and is constantly changing the real nation into an ideal nation. The particular form of the state passes away, that the universal principle of thought may be realized. As each civic unit is annulled, there arises out of this destruction the consciousness of human freedom. In Hegelian phrase:

The State

"The result of this process is then that spirit, in rendering itself objective and making this its being an object of thought, on the one hand destroys the determinate form of its being, on the other hand gains a comprehension of the universal element which it involves, and thereby gives a new form to its inherent principle."

The Governmental Process.—Civics is the science of citizenship and is a necessary form of rational control in the development of freedom. The different kinds of government, nomadic, patriarchy, theocracy, aristocracy, monarchy, and democracy represent various stages in the freedom

of the race. The underlying purpose in each form of government is to aid mankind in working out finally the problem of free government. The governmental process is shown in the republic developing out of the pure democracy and the federative (*E Pluribus Unum*) republic growing out of an integral republic. There is a divine idea rooted deeply in the governmental process that manifests itself in law, order and freedom and develops the different forms of control. The family, the school, the civil district, the municipality, the county, the state and the nation are expressions of the different governmental ideas applied to various units of control. Each unit has a legislative, executive and judicial process. These distinct functions are necessary to the government of a free people.

The central creative principle of our national government is an institutionalized thought forming the nation. While government has been considered a necessary evil, liberty and spiritual freedom can be secured only through some form of rational control. The ideal in government is the same as the ideal in school management, and that is, control should lead to self-government. That government is best which administers to the freedom of the people and which takes into consideration the consent of the governed. There is a gradual evolution in our national government.

The Mayflower Compact, instituted for the glory of God and the advancement of the Christian

Institu-
tionalised
Thought

faith, was a covenant to combine the Pilgrims into a civil body politic. In this compact, popular constitutional liberty was born. The First Written Constitution in the United States was based upon the doctrine that the right to rule is found in the free consent of the governed. This document provided for equal representation from the several towns and the choice of a governor and council by a vote of the free people. The spirit of the New England Confederation was that the common good must take precedence over individual privileges. The different governmental functions began to dawn in the Albany Plan of Union which provided for a President and General Council. The Declaration of Rights represented a further evolution in the governmental process and asserted individual rights and liberties of the American colonists. In the Declaration of Independence, the colonists pledged their lives, fortunes and sacred honors in support of the doctrine that they are, and of right ought to be, free and independent states. These principles of liberty and freedom were embodied in the Articles of Confederation. This was the prototype of the federal constitution and put in visible form the idea of civil freedom. "In order to form a more perfect union, establish justice, insure tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity" the federal constitution was ordained and established. This constitution

Evolution in
Government

is the supreme law of the land and is the highest expression of the consciousness of freedom.

Thought in Picture Study.—The doctrine of thought may be further illustrated by a study of pictures. To picture is to put meaning into form, to externalize the internal image, to give expression to the self, and to throw symbols into space. The psychological movement in picture-making appears to be as follows: The child sees the picture, for

Holmes instance, "Can't You Talk?" by Holmes, and at first does not distinguish it from

the real object. He expects the picture to talk, to play and to bark. He gradually discriminates between the real object and the picture, distinguishing appearance from objective reality. In teaching drawing the picture becomes a physical symbol for the expression of thought. The internal mental process separates the image from itself, projects itself from itself into space and finally in studying

Landseer the picture re-thinks itself. Landseer in painting "Saved" through the activity

of mind, creates an image which is externalized and made objective. The child is attracted to this external form which at first seems alien to himself but which after a careful study takes on meaning and pictures his ideal, true life.

Reynolds "Angel Heads" by Reynolds is an ideal conception created by the inner activity of the spirit itself. In throwing these thoughts

out, the canvas becomes spiritualized and represents the true nature of the innermost life of the soul.

This picture reveals the essence of spirit and portrays the inner unfolding soul of Reynolds. It not only shows his creative genius, but delineates his architectonic skill in the arrangement of the angels' heads.

Out of the creative mind of Herring springs forth that beautiful conception, "Pharaoh's Horses." The artist is reflective, contemplative and idealistic and penetrates the canvas with his own thought. The idea seeks that form which is capable of expressing its meaning and the meaning in turn is expressed through the external symbol. Fra Angelica portrays the Christian doctrine of spiritual longing and aspiration.

Herring

Fra
Angelica

He was a devoted student of art, and at the same time a devout monk, and expressed the intense religious feeling of his own soul. "The Annunciation" painted on the wall of a monastery, illustrates a combination of architecture and painting. The picture represents Gabriel just descending from heaven. In a half kneeling attitude he announces the divine message to Mary who receives the annunciation with resignation and meekness. The beautiful tints of this painting harmonize with the thought and sentiment of the production.

Titian was an idealist and painted out of the fullness of his mind. He did not imitate nature, but painted the inner subjective, reflective consciousness of the true soul of an artist.

Titian

Rembrandt, the great Dutch painter was an original thinker and a star of the first magnitude in the

Rembrandt great cluster of artists. He was both an idealist and realist, now painting the objective realities of the world and now expressing the inner truths of life. By means of light and shade he was able to express the most varied thoughts and the most delicate emotions. The painting, "Jeremiah," reveals the profound thought of Michael Angelo and externalizes the inner activity of a great thinker. Some one has said, "he was not a great painter nor a great colorist but a great draftsman, a great sculptor and a profound thinker." His ideal conceptions were the result of a vigorous mind, a vivid imagination and the ability to paint or carve these thoughts into a beautiful expression. He had that artistic insight which enabled him to express the varied mental emotions through the modified form of the human body. In his "Last Judgment" he poured out his thoughts in a stream of living emotional life.

Leonardo da Vinci painted "The Last Supper" upon the wall of a Milan monastery. He took as his pattern the table, the table-linen and the china-ware of the monastery. The figures around the table are arranged in threes, but all are held in organic unity. They are Bartholomew, James, Andrew, Judas, Peter, John, Thomas, James, the elder, Philip, Matthew, Thaddeus and Simon. It is said the artist was never able to finish the figures of Christ and Judas. He had the ability to sketch the inner secrets and mysteries of human life and used in a masterful way the delicate

tints of light and shade to picture the yearnings of the human soul.

The beauty in Raphael's pictures does not depend upon facial expression, but upon architectonics of the productions. His skill as an artist is found in his ability to paint the picture as an organic whole. While the individuals are Raphael strongly marked in "The Transfiguration" there is an organic unity in the production. Christ floats toward the source of light, the invisible Father, by whom all are made visible. On the right Moses appears in contrast with Elias on the left; the one, the law-giver, the other, the prophet. On the top of the mountain are the two disciples, John on the right, gracefully bending his face downward from the overpowering light, and James on the left hiding his face in humility. Peter, the bold, gazes directly on the splendor until finally he is overcome and is compelled to cover his eyes with his hands.

Below the mountain are two groups. On the right, coming from the distant hamlet is seen the family in which the demoniac boy forms the centre. The boy is supported and restrained by his father who is predisposed to insanity. There is also seen in this picture the boy's mother, the mother's brother, her father, and an uncle who is a simpleton. This group is supplicating the nine disciples for relief who are sympathetic, but whose looks show they can do nothing. One holds the Law, but the letter needs the spirit to give it life. Andrew holding the Law is Peter's brother; Judas is at the

extreme left; Matthew is looking over the shoulder of Bartholomew who is pointing to the demoniac boy. Thomas bends over the boy with intense interest, Simon is kneeling between Thomas and Bartholomew, while Philip is pointing to the scene on the Mountain. James, resembling Christ, stands behind Jude his brother.

Every true work of art has an organic unity which holds the parts together. The central idea of this painting is the divine in contrast with the human.

Organic Unity Christ above is transfigured and the mortals below are illuminated. Above are seen the celestial light-seekers in contrast with the three swooning disciples. Below the mountain are observed two groups in contrast; one broken in spirit, and the other sympathetic and feeling the need of the Lord. The painting consists of a series of dualisms held together by the transfigured Christ.

A work of art appeals to the senses but it is the reason which gives it organic unity. The picture has a sensuous effect upon the observer, and the entire painting has its focal centre in the Savior. Elias inspired by the celestial is opposite the maniac boy who is controlled by the demoniacal. Elias floats freely while Moses carrying the heavy tables of the Law seems to be supported by the tree.

In Christian art the idea seems to be too transcendent for art to express. The canvas is inadequate to reveal the inner spiritual longings. Christ in eternal unity with the Absolute looks upward

and expresses a dependence. The two saints on the right, St. Lawrence and St. Julian are placed there to bear the message to Christ that he is needed below. The transfigured was a spiritual entity and to see and understand this painting it is necessary to look beneath the sensuous for the meaning. To think the painting is to retrace the thought of Raphael as he pours it out on canvas. It is again noticed that the highest, deepest and final doctrine of thought is that the mind must everlastingly think its products. The delicate shades of meaning, the physical and spiritual appearance as dropped out of the mind of Raphael, are to be observed and studied.

This discussion of "The Transfiguration" is based upon an interpretation of this masterpiece in the Journal of Speculative Philosophy.

THE TEACHING PROCESS

THE LIFE PROCESS

XVI.

THE PROBLEM

THE school process realizes itself in the teaching process; the teaching process attains its final purpose in the life process. The school is organized that some one may be taught; teaching not only prepares the individual for living, but is itself a life unfolding process. The purpose of the whole educational process is to train the individual into the consciousness of right living. The ultimate aim in education is knowledge, discipline, insight, inspiration, character and a well-rounded and noble life. No doctrine of education is complete that does not discuss the origin and nature of life and the fundamental principles underlying human intelligence and culture.

Theories of Life.—Many of the great thinkers of the world have tried to solve the problem of human life and the following theories are perhaps the most interesting forms of the solution: biogenesis, by parentage; creation, by an act of the Eternal Energy; abiogenesis, by the natural action of preëxisting conditions in the ultimate constitution of things. The theory of life from life accounts for our own existence and for all organic life. The smallest microscopic organism

and the largest whale that plows the deep have their origin in preëxisting life. This doctrine also explains the fossil life but does not give us any clue to the *first* life. According to the theory of creation there is an Infinite and Eternal Energy from which all things proceed. The mechanical school of thought makes life due to an interaction of matter and force. Dr. Büchner makes the statement that:

“All organic beings owe their origin and propagation to the conjoint action of natural forces and materials.”

Haeckel makes physical and chemical properties of certain bodies the real cause of all organic life. The original life upon the earth has been accounted for by spontaneous generation. Dr. Bastian writes:

“Both observation and experiment unmistakably testify to the fact that living matter is constantly being formed *de novo* in obedience to the same laws and tendencies which determine all the more simple chemical combinations.”

Thomas Huxley denies the Doctor's statement and declares:

“The doctrine of biogenesis is the only theory that will explain the nature and origin of life.”

It is a scientific fact demonstrated beyond the possibility of a doubt that life cannot come from the non-living. If we do not accept spontaneous generation, admits Haeckel, then we have to accept the miracle of a supernatural creation. Clifford made an ingenious guess at the origin of life and how living matter acquires the peculiarity of producing

its kind by combining spontaneous generation and mechanical action. A few years ago scientists made an attempt to explain the phenomenon of life by means of a vital force resident in living matter. This energy is *life* and manifests itself in living beings and at death is said to leave the body. The non-mechanical school of thought adds a "something beyond" to physical laws to produce life. Lotze combines mechanical laws with the ordered action of the Absolute in his theory of life. Another theory allied to this makes matter, originally endowed by the Creator with a subtle latent quality, contain the original germs of life.

The Non-
Mechanical
School

In the final statement of the problem of the origin of life there are two opposing hypotheses that are worthy of careful consideration: one is called the doctrine of special creation and the other the doctrine of derivation. The doctrine of special creation was accepted up to the time of Goethe. Fiske describes this doctrine by saying that a homogeneous clay model of human form was transformed into a heterogeneous combination of organs and tissues. The scientist usually rejects the special-creation theory and accepts the doctrine of derivation. According to this theory higher forms of life are gradually evolved from lower forms by the laws of variation, adaptation and heredity. In support of this life theory the scientist bases his arguments upon classification, embryology, morphology and distribution. The

Creation and
Derivation

best thinkers of the world to-day accept the doctrine that the evolution of life from monera to millions of species of plants and animals has been a change from homogeneity to heterogeneity and that life both physical and psychical is—"The continuous adjustment of inner to outer relations." Herbert Spencer has given the most profound and complete definition of life known to the scientific world:

"Life is the definite combination of heterogeneous changes both simultaneous and successive in correspondence with external co-existences and sequences."

The Bible ascribes the origin of life to the creative act of God:

"In the beginning God created the heaven and the earth. . . . All things were made by him; and without him was not anything made that was made."

The physicist speaks of life as a machine for doing work; the chemist defines life as a body of unstable compounds: the biologist analyzes all living creatures into organs and tissues; the philosopher characterizes life as an inner correspondence to an outer environment.

Doctrines of Mind.—Whatever may be the origin and nature of life, it is certain that its kindred force and highest form is mind. Lewes maintains that:

"Both life and mind are processes and neither is a substance."

Fiske defines psychical life as the continuous establishment of subjective relations that are in

correspondence with environing objective relations. There are three theories which attempt to explain the origin of mental life; namely, creationism, traducianism and evolutionism.

CREATIONISM teaches that God implants the divine spirit in man at birth. Dr. Ladd in explaining this theory asserts that "God produces 'from himself' an entity called a soul and puts it ready-made into the body." This author cannot conceive how a mind or a soul which has never performed the activities necessary to its existence can be placed ready-made in the body.

TRADUCIANISM sets forth the theory that God breathed the breath of life into some remote ancestor and that the race has inherited this mental characteristic throughout all ages. This doctrine transmits mental life through physical processes.

EVOLUTIONISM makes man's mental life a process of development. The mind is, when it begins to act. Its origin is in and through its activities. Before the mind functions it does not exist. The mind does not spring into full existence at a leap, but is a process, a development. Dr. Ladd would have us believe that—

"The existence of mind with respect to its origin, as well as with respect to the degree of its existence, is nothing apart from those activities in which the life and growth of mind consist."

Naturalistic evolution denies the necessity of grounding first principles in a potential, spiritual energy. This doctrine attempts to explain life

from purely mechanical forces. It supposes that at some period in the world-series through spontaneous generation, the higher form was created out of the lower. However, the best scientific thought denies the possibility of generating the living out of the non-living and lays down the axiom that *from nothing, nothing comes*.

The Spiritual Principle.—In order that naturalistic evolution may be possible it must be ultimately grounded in a spiritual principle which refers to an absolute first cause of the world. Among the mechanical forces of nature there must be some unitary, abiding and coördinating principle. This subtle causality is a spiritual entity and is the controlling power of all that is. The world movement cannot be explained on any rational basis except through this hidden power. It is impossible to explain the cosmic order unless the doctrine be grounded in a spiritual energy. To understand the evolution of the world it is necessary to connect its immanence with its transcendence. The immanent spiritual energy potential in the world is the result of a self-active Creator.

The spiritual cosmic principle is absolutely necessary to the theory of organic evolution. It places at the heart of the world an energy struggling between potentiality and actuality. A living organism is a synthesis of mechanical and physical forces. In the lower forms of life there is no complete return upon itself. When an individual has achieved sufficient world energy to return upon itself it marks

The
Hidden
Power

the dawn of the soul. The soul is a force having the power to transfer potency into actuality and to make a complete return upon itself, as in poetry and painting. Individuality is changed into personality and personality is based upon spirituality. The soul is a spiritual energy whose essential nature is not activity alone, but potentiality in a large degree. It is the law of the potential to realize itself constantly in the actual. The soul in its ultimate analysis is grounded in the self-activity of the Absolute. The world energy is transmuted into the soul and it is given the same movement as other world series; namely, a struggle between the ideal and real. The soul life grows and develops by a constant tension between its immanent and transcendent nature. The soul is a higher form of spiritual energy than that in life. In fact the soul is the climax of life development. There may be life without soul, but there can be no soul without life. Life and soul are not identical but the latter may be conceived as a species of the former. The creative energy in the plant and animal is an adumbration of the spiritual but only in man is there true soul activity.

Pedagogical Inference.—This doctrine of life and self-activity has a pedagogical inference as it furnishes a basis for a rational system of education. Dr. A. T. Ormond in "Basal Concepts in Philosophy" gives us the fundamental process in education:

"A science of pedagogy, in order to be adequate, must have two ideas as its basis; namely, first, the idea of self-activity as the central category of the soul's life, and, secondly, the idea of a development of the soul's activities and powers. The first idea conceives the soul as actuality, the second as potency. Now, there is needed, in order that pedagogy may become a real science, such a conception of the soul as will make a rational synthesis of the category of self-activity and development possible. . . . In the light of this theory, it is made clear that the process of soul-experience is a perpetual struggle of a thinking principle of spiritual individuality to overcome and transform an empirical nature that is dominated by mechanical categories and laws. It also becomes intelligible, that this process should give rise to an evolution of the soul's powers which follows the order of the development of actuality out of potency. This order, as the process of nature indicates, is from mechanism up to spirit. . . . All education is, teleologically, a spiritual function and must have as its end the awakening and development of the free self-activity of the human spirit. This free self-activity exists largely at first in a state of potency, and must be developed by a process which will lead it from the mechanical up to the spiritual. . . . Causation begins to dominate the growing intelligence of the child as a rational norm, which develops in it the historical consciousness and sends it out in a perpetual search for the efficient and final antecedents of things. . . . Now, we conceive that the ground principle of the secondary and higher education is to be found in this category of reflective reason in which the self-active spirit first achieves a rational standing-ground of its own as a free rational and personal agent; and the great business of the secondary and higher education will, therefore, be the development of this rational principle out of potency into actuality. For it must not be forgotten that while the end of all culture is the quickening of the spirit, its pedagogical methods and the instruments it uses must adapt themselves to the stages of an evolution."

Two Ideas
In Pedagogy

It is the function of education to develop the budding soul into a well-rounded life and to transform the hidden power lying dormant in the in-

dividual into pure actuality. There is implanted within every individual a spiritual principle which is immanent in the world and education should reconcile these two kindred forces. The school becomes an important factor in human evolution when it assists the individual in constructing an ideal world of experience based upon the order, uniformity and intelligence of objective existence. The reign of law and the reign of purpose both presuppose a divine intelligence which pervades all things and is the hidden power of the universe. Education is given a cosmic significance when it binds nature, mind and God into one organic system of knowledge.

XVII.

THE TENSION OF HUMAN LIFE.

THE fundamental truth underlying the history of thought is, the universe is alive, and is a dynamical organism constantly struggling for a more perfect realization of itself. In penetrating into the hidden meaning of the world it is found to be, in the last analysis, a powerful energy which is ever converting possibilities into actualities and is a purposive activity looking forward to an end. There is an intelligent order in the world which has its sequence in human life and is the guiding principle in human activities.

In the innermost constitution of all organic existence there is an ever present struggle between the old and the new, between the real and the ideal, and between what is and what ought to be. These mysterious processes are "God's way of doing things." All natural law is merely the law of God's own being. Every force in the world has its origin in the great Primal Force, and all energy from the Infinite and Eternal Energy. One of the greatest conclusions of modern thought may be summed up as follows: all life, all growth, all development are due to a continuous, progressive change in accordance to certain natural laws and by means of a resident power immanent in things. In every acorn there is a pulsating, poten-

Modern
Conclusion

tial oak. Life and growth in the oak consist of a series of changes by which the potential oak becomes the actual oak and by which the old form is destroyed and a new being comes forth. This tension is caused by a force residing in the acorn, in the soil and in the sunlight. This force is the heart-beat of the world and is akin to God himself. Lowell thinks that, "Every clod feels a stir of might."

This tension in the vegetable world is a fundamental law of all organic life and exists also in the animal kingdom. Tennyson happily explains the pranks of nature in his stanza upon the dragonfly and sets forth a true philosophy of life. Notice here and there how charmingly nature realizes her Fundamental Law ideals in this mysterious way! Notice how beautifully the chrysalis unfolds into the butterfly! Notice how joyfully the warbler breaks its shell and goes forth on its mission of song! Why does the wounded eaglet chained to earth look up to heaven with a tear in his noble eye? How does it happen that the lark ascends and sings? What causes the poet to sing:

"Ethereal minstrel, pilgrim of the sky,
Dost thou despise the earth where cares abound?"

These questions can be answered by saying that within the dragonfly, chrysalis, eaglet, lark and even the poet there is a resident force, an immanent something which moves each to the realization of the purpose for which it was created. In each there is a purposive adaption for some end to be realized

which implies that there is a supreme intelligence in the deeps of the world.

Ralph Waldo Emerson in his "Compensation" states the law of the world and, therefore, the law of human life:—action and reaction, darkness and light, heat and cold, ebb and flow, male and female, inspiration and expiration, systole and diastole, attraction and repulsion, matter and spirit, subjective and objective. While there is an inner dualism in the world there is also a unity lying beneath the differences. The mind recognizes a fundamental reality in the constitution of things which manifests itself in a dual activity.

*The Law
Of Life*

In both fauna and flora there is an abiding energy seeking perfection through contradictory elements. The upward life tendency is always a tension between the thing's lower and higher nature. There is not only a real conflict in the very nature of things, but there is also an interaction and causal relation binding things into a rational system. The structure of both thought and thing reveals the fact that there is a connecting power which organizes differences into unity. Dr. Borden P. Bowne in his "Theism" says:

"We replace the transitive causality playing between things by an immanent causality in an all-embracing, unitary being."

Human Action and Growth.—The great law of polarity running through the lower world is the main-spring of all human action and human growth. The plants and animals realize their ideals without

plan or purpose. Man has not only inherited this tendency toward higher life, but has also the ability to set up his own ideals and by force of will and intelligence, transmute himself into those ideals. Within man's soul there spontaneously appear visions of a fairer life that he has not yet attained. These ideals and aspirations create within him a longing for more life, higher attainments and nobler conceptions of living. It is true that any human effort, though it be unsuccessful, may change the whole life, and the ideal although not realized still becomes a powerful influence in molding character and conduct. In order to understand the true nature and meaning of an individual the process is not clinical, but is a searching analysis of the soul's innermost ideals. To understand the significance of a life, it is necessary to make a keen, inquiring insight into the individual's longings, yearnings and aspirations.

Man's Inner and Outer Nature.—A close study of human life reveals the fact that man's outer progress springs from his inner longings and yearnings. What man realizes, man first idealizes. The actualized individual is first a potential being. The Shakespeare you know is the Shakespeare transformed by an ideal. The Raphael you know is the matchless painter transformed by an ideal. The Edison and Marconi you know are the great scientists transformed by ideals in electricity. The outer progress of these individuals has its origin in their inner thought and high endeavor. There is a natural tension within the depths of man's soul

that causes him to crave more life, broader and more humanitarian conceptions of life and to demand for himself the highest possibilities within his reach.

If there be a human being destitute of ideals, devoid of aspirations, without longings and yearnings—that one is already dead. There is nothing so sad and tragic as the death of the soul's ideal. There is not anything so destructive to life and success as the failure of the heart to be attuned to the music of a noble ideal. However, there is nothing so grand as a fertilization of all that is true, beautiful and good, and nothing so worthy to be attained as a clearly thought out purpose of life. By fertilizing the higher life by the

Ideals

dust and ashes of the lower, man reaches that perfection which is the goal of all human endeavor. There is no incentive so powerful to keep one on the right track as to struggle to attain a high ideal. It is the headlight down the path of life that illuminates the journey and makes life worth living. A true life is a life of effort, a struggle toward higher attainments, a tension between the possible and the actual, a warfare between the lower and higher nature, a polarity between what I am capable of becoming and what I have already attained. Some one has declared:

"The idea must be far enough above us to keep us looking up toward it all the time, and it must be far enough in advance of us to keep us struggling toward it to the end of life."

The Universal Tension.—There is a universal tension enthroned in the innermost essence of our

being. We have inherited this fundamental principle of life from the world order and are, therefore, essentially related to the ultimate origin of things. It should be our highest glory to live every moment of our lives in harmony with this divine principle.

Dying
To Live

The life of a spiritual being is the continual process of dying to live. Every step in the life of the spiritual is due to an antagonistic process of the natural. As the natural self dies the spiritual self is born. To die to live is as true as it is paradoxical. The true doctrine of life is—

“He that findeth his life shall lose it.”

Self-realization is in and through self-sacrifice. Man is a rational being and has the power to transform his potency into actuality and to pass beyond the state of immediacy into the realm of higher life. It is the nature of spirit to extend itself beyond itself to its otherness. Man as a spirit is separated from his natural being in which there is imperfection and is gradually led to realize his spiritual freedom which is perfection. By means of knowledge and reflection, he finds out that he is not what he ought to be and hence increases his struggle to realize the highest life possible.

The true life of a human being should be a process of perpetually becoming, ever striving, always pursuing, constantly struggling and joyfully attaining. In order to attain this high ideal of life we must carefully watch how we live. We must store our minds and store our soul with

The True
Life

the sweet and wholesome things of life. What is implanted in the soul as the years pass by, is carried to the grave. It is sometimes thought that you can break a law of nature. The laws of nature are as immutable and eternal as the everlasting God himself. You cannot break a law of nature, but if you continue to run counter to it, it will break you, physically, mentally and morally. Edward Howard Griggs has truly asserted, that to exist is to struggle; to struggle means self-realization; self-realization means personality. The life of human personality is a life of growth, a life of love, a hunger for truth, the devotion to ideals and the reverence for principles.

The Highest Ideals of Life.—The loftiest attainments reached by mankind have been realized by those thinkers and humanitarians who live most truly and completely: Socrates, Bruno, Saint Francis of Assisi, Martin Luther, Paul and Christ. It seems to be a law of life that the world's advanced thinkers and leaders must suffer for the Advanced
Ideals doctrine taught. Socrates said: "There is no danger of my being the last." The matchless philosopher while talking of death, immortality and the hope beyond deliberately drank the cup of poison. Bruno was an advanced thinker of fundamental problems and his doctrine was far ahead of his time. Many years after he was condemned to death a monument was erected to his memory. Martin Luther stood firm in his doctrine and said:

"I cannot and will not recant, God help me."

The life of Saint Francis of Assisi has many important lessons to teach to humanity. His earnestness, sincereness, sweetness, tenderness, keen spiritual insight and close sympathy for lowly life make him a representative of the most ideal doctrine of life. He set forth the following ideals of life: To be good, to keep life pure, to keep one's spirit sweet and attractive, to try to be true to one's insight, to express in personal life the noblest ideals and to be happy in doing good and making others happy. After proclaiming the sublime doctrines of life Paul suffered for the great truths enunciated. The life of the Great Teacher was a life of the spiritual, a devotion to truth, a life of love and the embodiment of the ideal of all ideals.

The problem of life is to know the objective world which must flow back into man's nature if he realizes his true destiny. To understand the content of our life, we must go beyond ourselves and peep into the universal thought of the world which is the other self we are struggling to attain. The life of reason is beyond us yet in us. That to which

Freedom we surrender ourselves is in fact our real self. An impulse for higher life is grounded in the very nature of thinking beings. The soul thirsts for something beyond itself, for something to complete itself and fulfill its mission. It is an immanent principle of the human soul to hunger for the truth which is to make it free. The highest ideal possible in human life is to realize the consciousness of our own freedom.

XVIII.

THE INTERPRETATION OF LIFE

THE life process may be interpreted scientifically, philosophically and poetically. The poetic interpretation of human life reveals the profound mysteries of human existence.

"Literature is an artistic expression of life; art is the mode of expression; life is the thing expressed."

The genetic principle which creates literature is the throbbing, pulsating life of the author. Literature is not only a spontaneous outgrowth of human life, but it is also the best revealer and interpreter known of the life process itself.

Literature

The constructive energy of life is the productive force in literature; namely, a struggle between the real and ideal. Literature is born through that spiritual activity in which the soul is seeking self-realization. The innermost core of human life is revealed and expressed in literature. To study literature assists the individual in actualizing his possibilities. It compares our real condition with our ideal condition and gives us an impetus to attain the greatest possibilities slumbering in our soul. The poet idealizes life and awakens within each literary student a longing for all that is truest, best and noblest.

The Psychology of Poetry.—By studying a poem we are able to gain a clear insight into the spirit-

ual nature of the author. Poetry is an interesting and comprehensive text-book upon the subject of Psychology. We may speculate concerning the real nature of the human soul; we philosophize concerning the origin and nature of human knowledge; we may observe and interpret the facts of human consciousness; we may make laboratory and physiological tests of mental life; but as literature is a natural outgrowth of the human soul, it is, *par excellence*, the greater revealer, interpreter and translator of the life process.

In poetry the author gives utterance to the deepest expressions of his heart and soul and reveals his motives, thoughts, feelings and volitions and hence externalizes the inner workings

Poet a Soul-prophet of his spiritual nature. The poet is a soul-prophet and gives us in his productions the quintessence of his life. In literature we follow the actual movements of the inner, throbbing soul. In psychology we study man's spirit by introspection, analysis, induction, dissection and experimentation. The poet alone has that penetrative insight, that keenness of thought, that inquiring attitude of mind which enables him to probe into the hidden recesses of the human heart and the human soul. He is a seer and has that divine vision which enables him to penetrate into

Soul Life the mysteries and complexities and subtleties of soul life. The poet opens the windows of the soul and watches the mystic forces of mind move hither and thither. He penetrates

into the inner chamber of consciousness and discovers the man invisible which is made visible in literary form. He is a past master in picturing the motives, desires, aspirations and the whole machinery of human consciousness.

Edward Howard Griggs tells us:

"Life itself is becoming a religion to-day. We are learning that there is nothing more sacred than a human being; and that the most tragic, pathetic or exalted motives are those drawn from the universal, yet intimately personal phases of daily experience. Wordsworth felt the dim presence of the new inspiration, and stammered it haltingly in the most exquisite of his unequalled works. Carlyle lived under its brooding presence, but incapable of voicing its positive message except in fragments, could only storm against its enemies. Shelley was the singer of its subtlety, Emerson the prophet of its exalted spirituality, Goethe the expression of its masterful self-affirmation, Browning the seer of its exultant love and joy."

Browning "the subtle-souled psychologist" was the supreme analyst of the human soul as shown in the following quotation:

"Truth is within ourselves; it takes no rise
From outward things, whate'er you may believe.
There is an innermost center in us all,
Where truth abides in fulness."

Browning also explains the nature of knowledge:

"To know
Rather consists in opening out a way
Whence the imprisoned splendor may escape,
Than in effecting entry for a light
Supposed to be without."

The poetical mind has that attribute which Wordsworth calls, "The vision and faculty divine."

Browning not only analyzes the activities of the soul, but gives us a clue to the fundamental process in education.

To understand Tennyson is to study, to interpret, and to systematize his thoughts on God, Freedom, and Immortality. Tennyson was intensely interested in the deeper problems of human life. He was inclined to inquire—

"into the laws
Of life and death, and things that seem,
And things that be, and analyze
Our double nature, and compare
All creeds till we have found the one,
If one there be."

Tennyson took the position that God in his essential nature and being is unknowable. He is not an object of knowledge, but an object of faith. He makes a distinction between the knowing mind and the believing mind. He asserts that the agnostic is right in teaching that God is unknowable, but is wrong in saying the human mind is shut out from God. Faith transcends reason and lays hold on God. Knowledge deals with the phenomenal, but faith, the noumenal.

In Memoriam, he writes:

"We have but faith: we cannot know;
For knowledge is of things we see;
And yet we trust it comes from thee,
A beam in darkness: let it grow."

In "The Two Voices," Tennyson discusses the problem of human life. He declares the cure of

the ills of life is more life—larger, fuller, completer life.—

“More life and fuller that I want.”

As an idealist, he reduced the external world to a spiritual principle. He once exclaimed, “depend upon it, the spiritual is the real.” Again he says, “spirit seems to me to be the reality of the world.” The only reality to Tennyson is spirituality. Matter is merely an outer manifestation of spirit.—Infinite Spirit or finite spirit.—

Idealist

“the power to feel I am I.”

Matthew Arnold defines poetry as a criticism of life. It criticizes the real life of the individual in contrast with the ideal life he hopes to attain. “The mute inglorious Milton” was one of the sublimest of all minds. He contemplated and described some of the grandest themes of human life. The multiplicity and variety of human life is expressed by the many-sidedness of the poetic mind.

Poetic
Insight

Dryden had the power of reasoning. Wordsworth taught the symbolism of nature. Swift showered abuse and ridicule upon his enemies. Burns’s heart was attuned to the eternal melodies of the universe. Coleridge was inspired by that divine breath which penetrates the hidden mysteries of life. Hawthorne created the model novel through a knowledge of the psychological process of his own inner consciousness. He made a deep study of the soul and is thoroughly prepared to interpret

the real life process. Longfellow has been called the poet of sympathy and through his "Psalm of Life" and other poems he reveals and interprets the many joys and sorrows of real life. In every fiber of Whittier's being there is a poetic expression. He is said to be not only a real poet, but all poet. The imagination of his brain and the affection of his heart were the chief characteristics of Holmes. George Eliot combined the speculative mind with the realistic imagination. She had the ability to analyze the deepest psychological problems. A few of the chief attributes of Goldsmith were delicate compassion, sympathy, generousness, humor, forgiveness and a benevolent spirit smiling on all. So long had the inner eye of Keats been fixed upon the beautiful, so long had he loved the visions splendid, that his soul took on the loveliness which he contemplated. Some one has said that the lines of the poet's face were chiseled into beauty by those sculptors called ideas and thoughts. Emerson makes the statement that we grow into the likeness of others by thinking the same thoughts.

Channing has well said, "It is forbidden for me to write or speak, but to aspire to be, to study hard, and to think quietly, to act freely, and talk gently. In a word let the spiritual grow up to perfection." When Arnold finds some one ready to graduate he whispers "One thing thou lackest. Let all thy life become one eager pursuit of knowledge." Carlyle tells us each new epoch in his life

began with the acquaintance of some great man. Only mind can quicken mind; only heart can quicken heart.

Perhaps the deepest literary interpretation of life is found in what is known as the Literary Bibles—Homer, Dante, Goethe, Shakespeare.

HOMER.—Homer's "Iliad" discusses the most sacred principle of the life process—the family. The poet fathoms the deeps of human existence. It consists of a series of dualism, the most important of which is that between the human and divine. These two worlds are separating, yet intermingling, communing yet differing. This epic not only represents a struggle between the human and divine but between the Occident and Orient. The purpose of this warfare was to restore Helen to her true institutional life. However, this was not a war for the restitution of an individual woman. Helen stood for a universal principle of social life. The beautiful Helen represents the race process, the restoration, civilization, freedom and the preservation of the home. This poem represents the heart-beat of humanity. The many conflicts, struggles and tensions in this poem once more emphasize the eternal law of the universe. The key-note to all existence, to all life, to all human life in particular is a tension between the possible and the actual and the final word of all existence is self-realization, freedom. The creative, architectonic principle of all literature is the soul trying to attain more life.

DANTE.—“The Divine Comedy” treats the life process as the process of death. It discusses the two lives of man, one of matter, and the other of spirit. It interprets the two fundamental principles, thou shalt surely die, and thou shalt surely live. Dante teaches that the final purpose of man is to shuffle off animality and become a spirit. It unifies the temporal life process with the everlasting life process, the seen with the unseen. Out of this dual process in the poem arises a harmony. The theme of the Divine Comedy is universal and intensely human, and “tells the tale of how man makes himself eternal.”

GOETHE.—“Europe’s sagest head” in commenting on “Faust” often spoke of the self-unfolding idea of the poem. It is constructed according to a law that is found in the poem itself. In the first soliloquy Faust is represented as a man who has spent years studying philosophy, jurisprudence, medicine and theology. He finally comes to the conclusion that man cannot know truth. However it is by means of knowledge that he denies knowledge, but at the same time it is by means of aspiration that he affirms the validity of truth. The theme of “Faust” is the theme of all poetry and philosophy—the problem of knowledge.

SHAKESPEARE.—“The thousand-souled” poet was the prince of psychologists. He had that penetrative genius which enabled him to analyze and dissect the human soul. More can be learned concerning the intricacies and activities of man’s

spiritual nature by reading Shakespeare than by studying any ordinary treatise on psychology. Shakespeare in his "to be or not to be" strikes at the fundamental problem of human life. It represents the irresistible conflict between optimism and pessimism. There is nothing in the English language that excels Hamlet's description of man:

"What a piece of work is a man! how noble in reason! how infinite in faculty! in form and moving how express and admirable! in action how like an angel! in apprehension how like a God! the beauty of the world! the paragon of animals!"

In fighting life's battles, we might do well to follow Lady Macbeth, "screw your courage to the sticking place" and again, "what's done is done" and frequently can never be remedied. According to Cassius "I cannot tell what you and others may think of this life, for my single self I had as lief not be as live to be in awe of such a thing as I myself." Again is the true life process interpreted:—

"The fault dear Brutus, is not in our stars,
But in ourselves that we are underlings."

Shakespeare in his literary productions has made a complete analysis of the life process. He has portrayed every phase of human life, every emotion, every thought, and every life tendency. He has made a complete interpretation of human existence and has expressed every conceivable intellectual, moral, social, and religious phase of human life and human development.

TROWBRIDGE has fully described the real process of life and gives below the practical and essential doctrine of human activity.

"Give him a lift, don't kneel in prayer,
Nor moralize at his despair.
The man is down and his great need
Is ready help not prayer and creed.
'Tis time when wounds are naked and healed,
That the inward spirit be revealed,
But what ere the spirit be,
Mean words and hollow mockery.
One grain of aid just now is more
Than tons of saintly lore,
Pray, if you must, within your heart,
But give him a lift, give him a start.
The world is full of good advice,
Of prayer and preaching nice,
But generous souls that aid mankind
Are like diamonds hard to find.
Give like a Christian, speak in creeds,
And he shall wear a regal crown,
Who gives a lift when men are down."

THE UNIVERSAL PROCESS

XIX.

THE LOGICAL PROCESS: IDEA

THE school process, the teaching process and the life process must finally be grounded in a universal process. These educational processes are given a deep significance by connecting them with world relations. The abiding energy in the world is the formative principle in education. That which creates the world and makes it rational, organizes the school and makes teaching spiritual. Every factor in the school and every movement in teaching and life are related to an eternal process which gives unity to difference. Educational principles should be based upon a world movement in order to be made fundamental and abiding. The spiritual principle creating the school is actualized in teaching and life and universalized in the world process.

The World Process.—The true reality of the educational process and the abiding element of the world constitute one universal process grounded in reason. Reason is the underlying principle of all thought and all things and is the substratum of every institutional activity.

"The absolute or logical idea exists first as a system of ante-mundane concepts, then it descends into the unconscious sphere of nature, awakens to self-consciousness in man, realizes its content in social institutions, in order, finally, in art, religion and science to return to itself enriched and completed."

FALCKENBERG.

From the beginning of the history of thought a unity of the world has been presupposed. This unitary principle has been conceived to be a single substance, a mathematical relation, a flux of things and finally an immaterial reality. The ultimate problem of the ancient thinker was to understand the world as purposive and the product of spirit, and to comprehend the underlying rationality of the universe. The final solution of the cosmic problem is made by rooting the thing world in the thought world. Unless the law of thought equals the law of things, no interpretation can be made of the world. In reading the book of nature we translate the world thing into a thought thing. This process is possible only upon the assumption that there is a universal reason which connects the two series. To know the world is to think the world and to think the world is to unify the rationality of mind with the meaning of objective existence.

Thought can think the world only by presupposing that they have a common rational origin. The thinker behind the world and the thinker behind the thing are commensurable, hence a unification and a knowledge of the world become possible. Since the world without and thought within have a common element, the cosmic order can be assimilated by finite thought to the extent of its capacity. It is self-evident to all that the mind can never know anything beyond the sphere of thought. If the world be knowable, if knowledge

be possible, then nature is realized mind and the thinker finds himself in the thing.

World Knowledge.—A knowledge of the world is based upon the constructive activity of the mind in the interpretation of the thing series and also upon the fact that the cosmic order is an expression of supreme thought binding the two into a rational coherence. Both thought and knowledge owe their existence to a world intelligence which makes things thinkable and knowledge possible. The intelligence in the world to become knowledge must be transmuted into finite mind and organized by thought into rational relations corresponding to the outer order. The meaning in the world series becomes knowledge in the thought series in and through a universal, spiritual connecting energy. A knowledge of the world is obtained by the mind building into itself a knowledge structure of the contents of things. The thought of the world does not pass into the thinking mind, as you would pass a coin to another, but through the constructive energy of the mind it takes on to itself the meaning and significance of what is external to itself. The unification which takes place in thought and knowledge is not a *thing* unification, but a *meaning* unification. In one continuous equation the laws of things = the laws of thought = the laws of knowledge. The world which the mind grasps is a thought world and if the real world is not an expression of thought and does not have an intelligent basis it is cut off

World and
Thought

from all relation to the mind. The parallelism of thought and thing converges into a bond of knowledge wholly upon the hypothesis that the thing series has an organic relation to the thought series. Knowledge and spiritual freedom are attained by the mind incorporating into its own constitution the law, order and intelligence immanent in the world. In the educational process the mind finds itself in the world, realizes its own freedom and bridges the chasm between the thinking mind and the intelligent universe.

The Eternal Reason.—The primitive idea is the eternal reason which evolves itself into a world order and thought series. "The idea itself is a dialectic which forever divides and distinguishes the self-identical from the differentiated, the subjective from the objective, the finite from the infinite, soul from body. Only on these terms is it an eternal creation, eternal vitality and eternal spirit." Whatever form the idea may assume, whatever creation the idea may penetrate, whatever institution the idea may establish, it forever remains reason. It is the central principle of the universe and objectifies itself in nature, in school, in teaching and in life. The idea which creates the world of objective reality and organizes the school is not an immaterial substance bordering upon the mystical, but an immanent constructive power working out in actuality all the potentiality slumbering within the depths of the eternal reason. The school is what it is by virtue of

The
Productive
Energy

this ideal self-creating principle which has not only the power of initiation, but also self-realization. This element in the school is *causa sui*, self-determining, self-supporting, and self-explanatory. This fundamental principle in the school and the world is the living spirit of all that is actual, pervading all forms of activity and dominating all phases of institutional life. It has the essential characteristic of productiveness and underlies all literature, science, art and education. It is the immanent principle found in every process of education and the substratum of all world existence. The heart of the school beats in unison with the heart of the world.

The eternal reason is the connecting factor in every process of the school, the all-embracing energy upon which the teaching process depends and the fundamental reality sustaining life itself. This universal reason is a cycle, self-return, subject-object, the connecting link in the great educational chain and the paradisaical state to which all educative forces tend. This educational bliss is the perfect unification of teacher and pupil in the organization of the school, the complete identification of the pupil and the subject studied, and the total development of a perfect life.

The Idea a Process.—The idea is essentially a process because it consists in that round of movement known as source, separation and return. This triadal process has its root in thought or intelligence. This intelligible foundation of the world has been called "idea" by Plato and Hegel.

The internal rational essence of the world and the school, we call "thought." It is that which gives life and vitality to all things, physical, educational and institutional. The final cause of the world and the school is not a mechanism, but a spiritual principle. Every school process, every educational process has an internal finality which coördinates and organizes the various parts into a systematic whole. In studying the educational process the subjective school must not be confounded with the objective school, because the latter is finite and imperfect and the former is spiritual and perfect. It is the concept of the school process that makes it spiritual, and it is spiritual in order that it may realize its concept.

Idea in Education.—The fundamental triadic process in education is source, separation and return. Source is the ideal, constructive energy originating the school and its processes. Separation is the objectified idea developing the course of study and formulating a body of doctrines to be taught in the school. To return from this separation back to the original source is the final aim in education and is attained in and through the teaching process. It is through the activity of the human soul that the cycle of the world is made to harmonize with the cycle of thought. It is the purpose of education to objectify the self into the world of thought and to bring that enriched self back through a subject-object process called knowledge.

The
Triadic
Process

The universal process in education sets forth the doctrine that the objective processes in the outer world harmonize and correspond to processes in the mental world. The cycles of the universe have a kindred nature to the cycles of mental life. In pure contemplation the soul derives nothing from itself, but acts as a mirror in reflecting the thought of the world into its inner life. In scientific discovery, in poetic and artistic productions the soul not only has thought, but there is such an inner fertility of mind that it creates thoughts, types and forms. Creation is a higher form of activity than contemplation.

"To enjoy a truth is evidently not so sweet as to enjoy the conquest of truth; to contemplate beautiful works of art cannot equal the pleasure of creating them; the pleasure of a virtue practiced is nothing compared to the pleasure caused by a triumph over actual temptation; and, in general, productive activity is superior to mere contemplation."

PAUL JANET.

The mind before creating the school creates the type school. This ideal type contains in itself all the multiplied forces and factors making up the actual school. The type school is the The Type
School essence and the external objective fixed school is the existence. In every school there is a creative intelligence and a contemplative intelligence. While the former originates the school the latter recognizes the spiritual principle in the school and the knowledge contained in subject-matter. The teacher, the poet, the artist have creative

activity, while the student, the reader, the observer have contemplative activity. In the process of education the inner life of the soul is never considered a finished product, but a possibility forever changing into an actuality. Education is based upon the theory that—

“What thought discusses in phenomena is a manifestation of the divine and universal reason.”

Finality in Education.—The final cause of all educational processes is soul activity. The internal rational essence of the school, of teaching and of life is a thought activity. Every process in education and every process in nature may each be equally called ideas externalized. The final cause of the school is the originating cause which is in its ultimate analysis a spiritual essence. It is a law of mind that it constantly endeavors to attain the ultimate cause or reason of things. The
 The Eternal Reason supreme reason of the world, which is one with the internal meaning of the school, is the Absolute Idea. Both the school and the world are embraced in the eternal reason. The essential characteristic of this supreme principle is the fact that it reveals itself in some external form. The fundamental principle of reason which explains every process in education is a principle of activity and a principle of knowledge. The Absolute Mind is the supreme expression, ground and end of all existence.

The Notion in Education.—The notion is that underlying force pervading all things and is in its

ultimate essence a personality. It is a self-determining energy which has the power of transmuting the potential into the actual, the real into the ideal. It is the immanent in all things and unifies and organizes the chaotic educational world into rational order. The notion in its essential nature is creative and productive, and is the fundamental energy in all educational processes. It is a thought force which constantly strives to realize itself in the objective. A school is what it is by virtue of the notion immanent in its process. A process in teaching is what it is through the activity of the notion embodied in it.

Function
Of the
Notion

The fundamental process in education is a self-realizing act in which the subject is active in and through the object. J. G. Hibben says:

"It is of the very nature of the subjective as a thought activity that it should strive to realize itself in the objective."

The notion here discussed is not a psychological term but in its onward movement is a developmental process. In plant life it is the development of the oak tree from the acorn. In animal life it is a change from germinal matter to the robin. In man the evolution of the notion is a transition from potency to actualized life called self-realization or self-development.

Development

There is innate in the pupil a pent-up energy struggling to realize itself through work, development, education.

"The idea of development, the continuous unfolding of all that is potential in the notion, demands a single unifying principle in the midst of the super-abounding diversity of content, manifesting itself in a progressive process in which each succeeding stage is more completely realized than the one before."

This quotation from Hibben strikes at the very heart of the doctrine of education set forth in this book and is a solid foundation for building any theory of pedagogy. This text aims at foundation principles in education, the underlying ground of the school, the universal law in teaching, the fundamental life process, and that organizing and coordinating world movement, the eternal reason, which gives life and existence to all thought and to all things.

XX.

THE COSMIC PROCESS: NATURE

NATURE is a form of the eternal reason and an all-inclusive system of relations. The spiritual principle in nature is the source of these relations which constitute human experience and which is the unifying principle of the world. The activity of thought in gaining a knowledge of these relations harmonizes with the activity of divine mind in establishing them. The thinking human intelligence works in unison with the thinking, creative intelligence. That in nature which is an object of thought to me is determined by the relations which my thought establishes. In the Kantian sense the understanding makes nature.

Schelling calls nature an undeveloped, slumbering, unconscious, benumbed intelligence. He teaches that every product in nature is the result of a positive, centrifugal, accelerating, universalizing force and a negative, limiting, retarding, individualizing one. The creative activity of nature is unbounded and is seen in the struggle for existence in all organic matter. This dualism in nature is a cosmic principle which affects not only the material universe but is the projectile force establishing social and educational institutions. This struggle between the universal and the individual creates the school,

develops the fundamental law in teaching, explains the thinking process and makes the nature and meaning of life sun-clear.

Nature and Mind.—We are beginning to understand that nature and mind are not two contradictory elements in the world, but that they form one organic whole. Nature implies mind and mind finds itself in a living relation to nature. Nature is permeated by mind, and hence intelligence can grasp the meaning of nature. When mind finds itself in nature and when nature yields up its essence to mind, then the individual has realized æsthetic freedom. Nature does not exist in opposition to mind but they belong to one organic system of knowledge. The whole universe, mind and nature included, is a process consisting of law, order and rationality. The beauties, complexities and infinity of nature are manifestations of the eternal reason. The organic life of reason is the reality of both mind and nature and the inner connecting force in all educational processes. The cosmic process is a manifestation of reason and reflects itself in the consciousness of mankind. The essence of reason is to make itself known in some objectified form of nature or mind. It is the function of mind to bridge the chasm between itself and nature and to bring back to itself what was once estranged. The eternal reason is the heart of nature, the vital energy in organic life, the spiritual principle in man. This fundamental energy is both immanent and transcendent, both potential and actual.

Æsthetic
Freedom

The mind does not exist in and through itself, but in and through nature which is other than itself. Nature is not isolated and cut off from mind but has its reality only in relation to a thinking subject. The unity of nature and mind is realized in their difference and their difference presupposes their organic unity. Nature is a system of thought relations and results from the activity of mind. Thinkers are gradually accepting the doctrine that out of the absolute are objectified all the processes of nature and man. It is by means of a thinking human soul that the cycle of the world is completed and that man becomes identified with the eternal process by "Thinking God's thoughts after him."

Nature Study.—The purpose of nature study is to infuse new life and meaning into the course of study. It is a means rather than an end. To place the multiplied forms of nature in the hands of pupils trains them in observation, perception, judgment, discrimination, and gives them an impetus and an interest in school work. It quickens mental life by using fresh knowledge and opens the child's mind to the beauties and complexities of nature. It is also a powerful factor in developing the æsthetic nature of the child. The beauty of form and color, the adaptation and unity in nature fill the child's life with all that is pure, noble and lovely. This love of the beautiful may be further increased by a study of nature-art and nature-poetry.

The study of nature affords the child an opportunity for truth-seeing and truth-telling. It culti-

vates the child's ethical nature by requiring him to perform many acts of positive good deeds. It gives a basis of right living and trains the child to refrain from killing birds, destroying fruits and teaches him to accomplish something worth while. The chief purpose in nature study is to afford the school a basis for expressive work. Expression presupposes organized thought activity. The more interesting the content of expression, the more easily is the expression made.

Language.—Nature study is almost indispensable in teaching composition and language. It usually appeals so vividly to the child that he has a burning desire for utterance. It puts the child in the attitude of writing from inside out, rather than from outside in. Nature gives the child such an inspiration that he cannot refrain from composing. The attributes, parts and relations of nature constitute a logical arrangement leading to composition. The composition is literally in nature itself. The child thinks the thoughts and ideas in nature, and gives expression to them in a spontaneous manner. The truth, law and order inherent in nature lead to a rational expression, in language and composition. The composing process is an objectification of an inner idea in nature into an outer form of language.

Reading.—The first reading lessons should be the child's own composition based on nature study. These lessons should gradually develop into story, narration, and description. Emphasis should be

placed on processes, functions and relations of living activities. Nature lessons should gradually be expanded into informational and inspirational exercises. The child should read those lessons of nature which are most interesting and most true to life.

Drawing.—Work in drawing should be correlated with composition and reading. The forms of nature afford a splendid basis for work in drawing. The form, size and position of all objects studied in nature should be expressed by drawing. The natural object inspires the child to express his ideas not only in language, but also by some form of sketching. Drawing is also taught from inside out and is made a most interesting school exercise. Plants and animals appeal most strikingly to the child, in drawing exercises. The school-garden, training the child in pruning, budding and grafting trees, plowing, hoeing and fertilizing land, planting, cultivating and reaping crops, is a most valuable equipment for any school and gives much material for drawing, sketching, painting and color work.

Extensive and Intensive.—The first form of nature study should extend over the entire realm of nature. After the child knows something of everything, he is ready to know everything of something. Bird life and language are perhaps the most interesting and soul inspiring phases of nature study. A study of the songs of birds may be made interesting, instructive and entertaining. To make an intense study of bird life or any other phase of nature gives the child the scientific impulse and

initiates him into the scientific spirit. Nature study brings pupils in touch with the world of science, cultivates perceptive thinking and formulates a body of knowledge most valuable in education.

The Unity of Science.—After students have been trained in elementary and advanced science they should be finally taught the universal element in knowledge, the principles and laws beneath the phenomenal world, the ultimate unity and reality of all science and knowledge. It is impossible to study and teach any department of knowledge correctly without taking into consideration its organic relation to all other knowledge. There is a reciprocal relationship existing between all departments of science and a connecting link chaining them into one organic whole.

Knowledge
Related

Correlation is not a matter of juxtaposition of subjects from a mechanical point of view, but a study of the deeper relations existing in the very nature of science. According to Dr. Caird, "The presupposition which is the secret stimulus of intelligence and of the desire for knowledge, is the possibility of finding reason, rational coherence, connexion, system in all things; the conviction that in the whole realm of being, in nature and in man, in matter and spirit, from the least and lowest material object up to the highest intelligence, there can be no dualism, no contradiction, no contingency, no gap or gulf which it is impossible for thought to bridge; and this is virtually the notion that there

is really only one science, of which the various special sciences are but arbitrary divisions or degrees."

Teachers and students should not be satisfied to master an isolated science, but should seek an insight into those causal relations which bind the world together. In the onward sweep of thought, the chasm between mind and matter, nature, and spirit should forever be closed. We must continue to search after the unity of things until

nature, mind and God are shown to Unity in
Diversity belong to one organic system of knowledge. The mind, a unity and diversity, seeks unity in diversity in the world. This unity is not one of coexistence and sequence merely, but one implying a process or development. There is a law or reason running through the world unifying the mechanical and chemical, the organic and inorganic and matter and spirit. In the gradual development of the world one order of nature implies and prophesies a higher stage of existence. The mind in tracing out this unitary principle finally arrives at its own self-consciousness in which it is able to think the world in existence and to think it in the process of becoming an objective reality.

It has been shown that the world, education, the school, teaching and life itself are processes. These are not distinct processes, but phases of a fundamental world movement. Harmonizing with this doctrine, the mind is constantly changing and developing from existence to sensation, from sensation to consciousness and from consciousness

Rational Coherence to the highest stage of thought. There is no leap nor gulf in the physical or institutional world and no gap nor chasm in mind evolution. The whole world is made up of system, relation, connection and rational coherence.

It is usually considered that science treating of the laws and phenomena of nature is antagonistic to philosophy treating of mind and the fundamental categories of thought. There is a class of thinkers who scoff at the philosopher who are nevertheless philosophers in spite of themselves. They proclaim from the house-top, facts, matter, material forces, and that mind itself is a mere function of matter. They preach the doctrine of psycho-physical parallelism and maintain that physical forces are somehow converted into psychic activities. In the first place facts and experience are impossible without the laws of thought. It has been well said:

Philosophers "You cannot reach mind as an ultimate product of matter and force; for in doing so you have already begun with mind."

A fact is a thing made by the mind and has no existence except in relation to the mind. If mind is subtracted from a fact, if thought is extracted from an object, there is only a questionable fact or object remaining. The fact student, the experimentalist, does not wholly deal with hard material facts but uses law, force, matter, cause, effect, likeness and difference, substance and attribute, purpose and means, and becomes a philosopher in spite of himself.

XXI.

THE SPIRITUAL PROCESS: MIND

THE logical process traces the absolute intelligence in its movement to self-consciousness, separating itself from itself and returning to itself in order to know and understand itself. The cosmic process reveals the mind principle in nature and unfolds the process by which nature loses its identity and becomes spirit. The spiritual process explains how this estrangement is removed, how spirit identifies itself with itself and how it attains its formal essence, freedom. The mind buried in nature gradually unfolds itself into consciousness, self-consciousness and reason. This awakening from its bondage, by which it identifies itself with the object immediately, by which Mind Free it knows itself in determining the object and by which it knows the object as its own process is an act of spiritual creativity. The mind in its final evolution becomes rational and universal by completing the cycle and recognizing in its otherness a spiritual principle akin to itself. The mind's impulse to think and to act, splits itself into a scission of the real and the ideal. The primal activity of spirit is to assert itself in contradistinction to the not-self, to separate itself from itself, and to return from this estrangement to itself, enriched and enlarged.

Self-activity which is self-conscious activity and which is the fundamental principle in every educational process is the basis of all knowledge and freedom. Prof. Ormond says the soul is not pure actuality, but rather a spiritual energy constantly passing from potency to actuality. According to this statement all education is a process in the unfolding of self-conscious activity. The self-activity of spirit is the basis of all knowledge and the origin and explanation of every process in education. The fundamental process in education, in the school, in teaching, in thinking, in life, is ground in a universal process, having as its elements a logical, a cosmic and a spiritual factor. The final purpose and aim in every process in education is freedom; individual freedom, race freedom, spiritual freedom.

Spiritual Freedom.—This doctrine of education has attempted to prove that the school is a spiritual organism, that teaching is a spiritual process and that the purpose of thought and life is to unfold spirit in and through the world process. The final problem in education—spiritual freedom—will now be solved by making a close study of Hegel's Philosophy of History. According to this thinker universal history is the progress in the consciousness of freedom. It shows successively that "one is free," that "some are free" and "man as man is free" and finally that "it is the freedom of spirit which constitutes its essence." The Orientals know that one is free, but this freedom

is mere caprice. The consciousness of freedom first arose among the Greeks, but their freedom was conditioned by the natural. The Greeks and Romans knew that some are free, but did not realize that man as such is free. The Germans influenced by Christianity attained the consciousness that man, as such, is free. History traces the process by which the consciousness of freedom is realized.

ESSENTIALS IN SPIRITUAL FREEDOM.—Anaxagoras was the first thinker to set forth the doctrine that *nous* governs the world. He did not have the ability and insight to apply this principle to the concrete world, but left it to Socrates, Plato and Aristotle to explain the immanence of the universal in the individual. Hegel uses the world spirit as the guiding force in the development and explanation of the historic process. To him each nation represents a particular element in the progress of the universal spirit. When a nation accomplishes the highest mission possible, it yields up the universal principle to another one higher in the scale of freedom. Each nation represents a phase or moment in the progress of the consciousness of freedom.

The material used in universal history to explain the progress of freedom, is law, principle, purpose, personality, subjectivity and the cunning of reason. These inner, human activities are externalized in human deeds, human events, human constitutions, and states. "The state is

Evolution of
Freedom

Reason
Governs
The World

The State

the divine idea as it exists on earth." In Hegelian terminology, society and the state are the very conditions in which freedom is realized. — It is only by a constitution that the *abstraction*, the state attains life and reality. — The state is the idea of spirit in the external manifestation of human will and its freedom. — Universal history exhibits the *gradation* in the development of that principle whose substantial *purport* is the consciousness of freedom.

The aims, the principles and laws, found in the the inner essence of history, are subjective and have no objective existence in the external world until the activity of man transforms these subjective relations into objective deeds. The so-called his-

torical personages are means to freedom
 An
 Historical
 Personality because they represent the advanced
 margin of human life and civilization. A
 world historical individual is devoted to a single
 purpose in life. In the deeds of such men universal
 reason realizes itself.

In the progress of nations, spirit is at war with itself, it separates itself from itself, overcomes itself and works out its freedom through its own creative energy. Spirit begins with a germ of potentiality, an undeveloped form and progresses toward actuality. The evolution of the individual par-

allels the evolution of the race. The child
 The
 Individual
 And the
 Race with stored-up energy is developed into
 an actual, ideal spiritual being, in the
 same manner that nations are gradually unfolded
 into higher forms of life and civilization. The edu-

cative process of the individual pupil harmonizes with the race process in history. According to this theory of culture epochs the child in its development parallels the race in its development toward freedom. The Orientals are the child race of unreflected consciousness and have only objective spiritual existence. They represent the dawn of human consciousness which is gradually unfolded by passing through the various stages of human progress and racial evolution.

China.—History begins with China, at the same time the oldest and the newest nation in the world. It is the oldest, because early in time China attained the present state of advancement. It is also the newest nation because subjectivity and inner life now begins to dawn upon the nation. As yet there is no distinction between the natural and the spiritual, the individual and substantial. The substantial, the Emperor, rules not
No
Dualism
 from a moral disposition, but as a despot.

There is no reflection on the part of the subject, nor no thought splitting into the real and ideal. In this grade of civilization, the person ruled does not recognize in the ruler a being in harmony with himself, "one with its own essential being." The universal will, the Emperor, rules, and the individual subject obeys. He does not think, he does not reflect, he does not question the motive of the ruler, but simply obeys. If he does not obey, if he separates himself from the ruler, he receives objective punishment (bastinadoed) rather than subjective

discipline. The element of subjectivity on the part of the one ruled is wanting. The law of the Emperor is the law of the subject. All subjective freedom, all moral ideas, all personality, all individuality, and all inner life in general are wanting in China's civilization. The Chinese do not distinguish between accident and intention. If one kills another accidentally, he is punished in the same manner as if he killed him intentionally.

As to religion, the Chinese worship pure Nothing as God. They have contempt for individuality, for personal existence and cherish the meanest opinion of themselves. Suicide is a daily occurrence, and shows the little respect they have for themselves and life.

The Chinese have no science in the true sense of the word. Their science is empirical and utilitarian. The Chinese philosophy is Pythagorean and based upon the fundamental principle of reason—Tao. They do not excel in mathematics, physics nor astronomy. Medicine is in its empirical state. The ideal and truly beautiful is not found in China's art. In short, whatever may be called spiritual, "unconstrained morality, in practice and theory, heart, inward religion, science and art properly so-called,"—all these are unknown in Chinese civilization.

India.—In China there is no contrast between objective existence and subjective freedom. In India there is a marked distinction between the spiritual and the sensual, between the real and the

ideal. China is the land of the prosaic understanding, India is the land of phantasy, imagination and sensibility. In China the Emperor rules, and the subject obeys without thought. In India "external conditions should become internal ones." It is represented as the land of dream life; that state in which the individual ceases to be self, in contradistinction to the objective world. According to the Indian doctrine there is a god in everything—a universal pantheism of imagination rather than of thought. There is a god in the Ganges, the Indus, moon, stars, flowers, beasts, parrot, cow, etc. "The divine is not individualized to a subject, to *concrete* spirit, but degraded to senselessness . . . things are as much stripped of rationality, of finite consistent stability, of cause and effect, as man is of the steadfastness of free individuality, of personality and freedom."

Evolution
Of Dualism

In China all are equal before the Emperor. In India this unity differentiates into casts. An organic life requires in the first place one soul, and in the second place, a divergence into difference.

Brahminism.—The Brahmins are the highest class by which the divine is presented and brought to bear on the community. To attain Brahm is the highest conception of the Indian. "When I fall back within myself, and close all external senses and say *om* to myself, that is Brahm." To secure unity with God, is to shut out all thought of externality. The spirituality

Brahm

of the Brahmins is not pure freedom, because it has no inward reflection in contrast with nature. Brahm is pure unity of thought, the substantial unity of all. The Hindoo cannot think a thing because he has not the ability to reflect by rational attributes. The activity of the Indian is due to external usage, rather than to personality and subjectivity. They are said to be tender, mild and beautiful, but lacking rectitude, morality and spiritual freedom.

As freedom is wanting, there can be no state, for:

"A state is a realization of spirit, such that in it, the self-conscious being of spirit, the freedom of the will is realized as law."

There is, therefore, no morality, no true religion and nothing that may be called historical truth. That which the Indian gains through imagination may be the opposite truth gained by intellectual reflection.

Buddhism.—The elevation of spirit to subjectivity takes place negatively through the doctrine of nothingness and affirmatively by a union of spirit in human form.

According to the dogma of Buddhism nothingness is the principle of all things. All things come from nothingness and all things pass into nothingness. The various forms of the phenomenal world are mere modifications of a process. Beyond finite existence, beyond the reach of the human mind is a region of Abstract Nothingness called the "Supreme Being." "This real principle of the universe is, it is said, in eternal

repose, and in itself unchangeable. Its essence consists in the absence of activity and volition. For Nothingness is abstract unity with itself. To obtain happiness, therefore, man must seek to assimilate himself to this principle by continued victories over himself; and for the sake of this, do nothing, wish nothing, desire nothing." To obtain perfection it is necessary to free one's self from all activity and to attain a state of pure passivity. To attain this condition is to harmonize one's self with Foe.

Buddhism also sets forth the theory that the spirit, immersed in the objective attains unity with the Absolute in an affirmative manner. Spirit is not understood in the pure subjectivity of thought, but as an immediate unreflected form of humanity. They worship the spirit of man, the spirit of a departed teacher or the living spirit of the grand Lama. In the Lamaistic worship it is the universal spirit in man that is revered and not the individual, objective, concrete being.

Persia.—The dualism of spirit and nature now develops into light and darkness. The principle of conscious development of activity, of life begins with the doctrine of Zoroaster. The universal is not recognized as spirit and truth, but is manifest as light. Ormuzd or light has within it the elements of the good and true, of knowledge and choice. Ahriman or darkness implies the evil, the bad, the wicked. Light involves not

Light

only a universal physical element, but also the spiritual purity, the Good.

"Man sustains a relation to light, to the Abstract Good, as to something objective which is acknowledged, revered and evoked to activity by his will."

It is the nature of thought to be dualistic. This dualism in Persian thought has not yet been overcome, because spirit has not completely realized itself. There is still recognized a struggle between light and darkness, natural and spiritual, ideal and real. In the progress of the consciousness of freedom in Chinese thought, in Indian thought and in Persian thought we are now brought face to face with the universal, but only as light. Spirit has not yet realized itself, has not yet overcome its duality and has not yet attained its freedom. This same dualistic principle is seen in Syrian life and thought, not as light and darkness, but as pain and pleasure. Pain is an element of worship, and a means by which man realizes his subjectivity.

Judea.—In Jewish thought there is still a struggle between the spiritual and the natural, the ideal and the real.

"Spirit descends into the depths of its own being, and recognizes the abstract fundamental principle as the spiritual. Nature, which in the East is the primary and fundamental existence, is now depressed to the condition of a mere creature; and Spirit now occupies the first place."

The Persian light has developed into the Jewish Jehovah. The spiritual, which in early thought

was dishonored, now frees itself of the sensuous, attains its true dignity and position, while nature is merely the robe of glory and has its existence and origin in the spiritual.

The individual has not yet attained his true freedom, "because the Absolute itself is not comprehended as *concrete spirit*" (Christ). The subjective feeling has been developed, the pure heart, repentance, devotion, but the Concrete Spirit concrete individual does not recognize himself as the polar opposite of Christ, because the spirit has not yet been made flesh. The Jews have not attained pure freedom, because their God is an exclusive unity, *one* people recognize *one* God. Individuality, personality, thought, righteousness and morality now begin to dawn upon the human mind, and there is a distinct progress in the consciousness of freedom.

Egypt.—In Egyptian civilization there is a continuous development and amplification of the dualistic thought, of the natural and spiritual, the human and the brute, the ideal and the real. Egypt is the land of the mysterious, "the riddle of the universe," the home of the sphinx, an ambiguous being, half brute and half human. The sphinx is the symbol of spiritual development, existing at this time in the history of the world.

"The human head looking out from the brute body, exhibits spirit as it begins to emerge from the merely natural—to tear itself loose therefrom and already to look more freely around it; without, however, entirely freeing itself from the fetters nature had imposed."

The sphinx is the problem solver of the world, and illustrates how spirit, bound as it were, with iron bands around its forehead, is struggling to free itself from the natural. The Egyptian spirit is trying to untangle itself from the natural, and to solve the problem of freedom. This problem involves two elements; spirit sunk in nature, and the impulse to liberate it.

The land of Egypt, with its houses half below and half above the ground, represents that phase of civilization in which freedom has not yet been realized. It gives an exhibition of spirit, compressed, imbruted, so to speak, but still struggling to unloosen itself, and to utter itself. The Egyptians attained a reflective intelligence which is clearly seen in the construction of their pyramids and works of art. G. W. F. Hegel in speaking of the progressive development of Egyptian spirit writes:

"It is that African imprisonment of ideas combined with the infinite impulse of the spirit to realize itself objectively, which we find here."

Egypt attempts to solve the problem of the spiritual; namely, that spirit is embedded in nature and there is an impulse to liberate itself. In Egyptian thought there is a sharp antithesis between nature and spirit. In China there is absolute unity between these two principles. By the Jews, nature is considered a manifestation of spirit. In Egypt spirit is imbruted, but is struggling to free itself.

The
Egyptian
Problem

"The spirit never rises to the universal and higher, for it seems to be blind to that; nor does it ever withdraw into itself; yet it symbolizes freely and boldly with particular existence, and has already mastered it."

While the Egyptians worshipped animals, they did not worship the material animal, but the incomprehensible principle slumbering in brute creation. They "worship the soul as still shut up within, and dulled by the physical organization." The Egyptian spirit is a mighty task-master, and attempts to solve the problem, "I am that which is, that which was, and that which will be; no one has lifted my veil." It also proposes for solution the final problem of the world—that the inner essence of nature is thought.

Greece.—In Greek thought, in Greek life, in Greek civilization, there is still progress in the consciousness of freedom. The Greek freedom is limited to the natural and there still continues the struggle between the natural Freedom in
The Natural and the spiritual, the real and the ideal, the mind and the world objective to itself.

"Man regards nature only as excitement to his faculties, and only the spiritual which he has evolved from it can have any influence over him."

The Greek people were a divided people, geographically speaking. This threw them back upon their own subjective life and thought. They depended upon nature for the basis of their reflection, and formed surmises and inquiries concerning the meaning and significance of nature. It is a dictum

of Greek thought that wonder and presentiment are the fundamental and essential categories of human thinking. Pan was subjective rather than objective, for he represented the soul thrilled by contact with nature. The Greeks listened to the murmuring and rippling fountains and interpreted them not objectively, but subjectively. The song of the Muse, is not an objectification of the fountain, but a creative and spiritual interpretation of its meaning. The noise of the rippling waters in the cave of Trophonius was heard and interpreted by the thinking, comprehending human spirit.

"It must also be observed, that these excitements of the spirit are in the first instance external, natural impulses. Succeeding them are internal changes taking place in the human being himself."

The Greek spirit transmutes the sensuous into the intellectual, the natural into the spiritual.

The fundamental principle in Greek thought, is the fact that its freedom is conditioned by and has an essential relation to some stimulus supplied by nature. Greek thought is created by objectivity, and its activity consists in translating the external world into the internal world. Spirit is not yet entirely free, not self-produced, not self-stimulating.

"The activity of spirit does not yet possess in itself the material and organ of expression, but needs the excitement of Nature and the matter which Nature supplies: it is not free, self-determining spirituality, but mere naturalness formed to spirituality—spiritual individuality. The Greek spirit is the plastic artist forming the stone into a work of art. In this formative process the stone does not remain mere

Spirit not
Self-produced

stone,—the form being only superinduced from without; but it is made an expression of the spiritual, even contrary to its nature and thus *transformed*. Conversely, the artist *needs* for his spiritual conceptions, stone, colors, sensuous forms to express his idea. Without such an element he can no more be conscious of the idea himself, than give it an objective form for the contemplation of others; since it can not in thought alone become an object to him."

The central thought in Greek life and character is individuality conditioned by beauty. This idea in realizing itself assumes the forms: the subjective work of art—the culture of the man himself; the objective work of art—the Beauty shaping of the world of divinities; the political work of art—the formation of the constitution and the relations of the individuals composing it.

THE SUBJECTIVE WORK OF ART.—This process consists in such a development of the body that it becomes a perfect organ of mind. The external, objective, physical body is made to harmonize with the internal, free activity of spirit. In games and æsthetic displays nature is wrought into spirit and the corporal is made to harmonize with the will. The outer corporal individual moves in tune with the inner spiritual being.

THE OBJECTIVE WORK OF ART.—This is a process of shaping the divinities and making the idea assume an objective existence. The essence of the Greek divinity is spirit, not absolute spirit, but spirit dependent upon outer conditions. The divinity is a specialized form of existence and manifests itself in the sensuous world. The Greek gods were personalities imaged in stone, in human form.

They were manifested in human form because no other form can represent so well the spiritual. It is the essential nature of all existence to manifest itself in a form similar to itself. The Greek Religion Greek religion was defective, because its gods were a permanent manifestation of the spiritual, while the Christian God (Christ) is a temporary phase of the divine. Christ died, but the Greek gods were permanent in marble, wood and metal. God did not appear to the Greeks, for spirit had not yet attained its ultimate freedom.

"One element of spirit is that it produces itself—*makes* itself what it is: and the other is, that it is originally free—that freedom is its *nature* and its *idea*."

But as the Greeks had not attained absolute freedom, they did not realize spirit as a universal principle. Since mere subjectivity was not understood by the Greeks and since the human spirit had not attained its true position, the Greek spirit was involved in fate and oracles.

THE POLITICAL WORK OF ART.—The State is not a subjectively developed and beautified physical existence, nor an objectively created deity. "It is here a living, universal spirit, but which is at the same time a self-conscious spirit of the individuals composing the community." In Grecian political life the individual has not attained that degree of freedom in which the subjective, social unit has become dependent upon the state. In Roman civilization an abstract sovereign power rules the

people. The Greek constitution is founded upon a customary morality rather than upon a subjective, reflective conviction and disposition. The abstract state was alien to the Greeks and they, therefore, lived in accordance to established manners and customs. The Sophists introduced subjective reflection and thinking, and declared that man is the measure of all things. Socrates taught that thinking is a guide to morality and true living; Plato, that the good can be realized only in the state, and Aristotle, that the final purpose of education is to reproduce in the soul the institutional world.

The
State

This awakening of the inner man was antagonistic to the gods, destroyed the state founded upon custom and wont, and inaugurated a new civilization based upon inner subjective conditions. The social unit now destroys the customary moral life, and sets up a state dominated by thought and freedom. The disintegrating principle in Greek life is:

The
Social Unit

"Subjectivity obtaining emancipation for itself. . . . In short, subjectivity comprehending and manifesting itself, threatens the existing state of things in every department. . . . Thought, therefore, appears here as the principle of decay of substantial morality; for it introduces an antithesis, and asserts essentially rational principles."

Rome.—The duality of life and thought, running through racial development now approaches reconciliation and freedom. Greek freedom was conditioned by the natural, but in Roman thought,

spirit retreats inward upon itself, rethinks itself and externalizes itself in the form of an abstract political constitution, which governs the concrete individual.

Inner Subjectivity This abstract principle creates a personal-ity *versus* universality and establishes the fundamental principle of legal right and personal property. The two principles of Roman civilization are political universality and abstract freedom. The social units are now sacrificed for the abstract universal principle of the state which dominates and rules the concrete individual. The repellent units composing the nation are held together by that abstract freedom, that abstract state which rules with iron power. To compensate for this severity of governmental power, the Roman was permitted to exercise a like control over his family.

Roman religion was something constrained, something concealed, as the etymology of the term religion would indicate. This inner secret of mind, this inner struggle of soul, this stupid subjectivity of life, this melancholy condition of the world, this era of hopelessness and despair, misery and dejection, oppression and decay, pictures the fulness of time, when God sent his Son, when spirit was made flesh, and when peace and reconciliation came to the world.

Christianity.—In the progress of the consciousness of freedom, self-consciousness has now arrived at that stage of development in which it realizes within itself the idea of spirit. The essential nature

of spirit is that it produces itself and in its second phase (Christ) it separates itself from itself.

"Christ has appeared,—a Man who is God,—God who is Man."

This implicit unity between the first and second person in the trinity exists not only for the "thinking speculative consciousness" but it must also exist for the "sensuous representative consciousness." This sensuous manifestation of Spirit had a temporary existence and after death, Christ himself says:

"When I am no longer with you, the Spirit will guide you into all truth."

Through the second person in the trinity
the church was established.

The
Trinity

"It has been already remarked that only after the death of Christ could the Spirit come upon his friends; that only then were they able to conceive the true idea of God, viz., that in Christ man is redeemed and reconciled: for in him the idea of eternal truth is recognized, the essence of man acknowledged to be spirit, and the fact proclaimed that only by stripping himself of his finiteness and surrendering himself to pure self-consciousness, does he attain the truth."

In human development finite freedom has been annulled in order that Infinite Freedom may be realized. Christianity not only harmonizes finite mind with the Infinite Mind, but it affords a fundamental principle for the foundation and explanation of secular relations. The religious consciousness now penetrates all civic life, organizes the State, creates laws and establishes

The
Religious
Consciousness

constitutions. Christianity harmonizes nature, mind and God and gives depth and meaning to every process in education.

"It was then through the Christian religion that the Absolute Idea of God, in its true conception, attained consciousness. Here man, too, finds himself comprehended in his true nature, given in the specific conception of 'the Son.' Man, finite when regarded *for himself*, is yet at the same time the image of God and a fountain of infinity *in himself*. He is the object of his own existence, has in himself an infinite value, an eternal destiny. Consequently he has his true home in a super-sensuous world—and infinite subjectivity, gained only by a rupture with mere natural existence and volition, and by his labor to break their power within him. This is religious self-consciousness."

In and through the subjective inwardness of the Roman world and in and through the principles of Christianity, rapid progress was made in the consciousness of freedom. These Christian principles must now penetrate secular affairs, the State, the nation, the school and spiritual freedom, *as such*, must now be studied and explained, as evolved and developed in the German world.

THE GERMAN WORLD.—The dualism (the objective and the subjective) inherent in the development of civilization, now becomes reconciled in and through the principle of spiritual freedom. The Germans possessed this idea, as a basis of their religion, and attempt now to make it free and concrete in their civilization.

"The Greeks and Romans had reached maturity within ere they directed their thoughts and energies outwards." The Germans absorbed foreign principles

and converted them into their own life. In Christianity the individual has realized his true being in and for itself, but it is in German thought that we have the free spirit, the new spirit, the spirit of modern times. The free spirit is the central energy of the world, out of which are evolved thought and reason, and those norms essential to the construction of the State and its constitution.

The Free
Spirit

Since the spirit of Christianity is the great civilizing force and the most important factor in human freedom, it will be interesting to study thoroughly the doctrine of the church:

The Church

"The essence of the Christian principle has already been unfolded; it is the principle of Mediation. Man realizes his Spiritual essence only when he conquers the Natural that attaches to him. This conquest is possible only on the supposition that the human and the divine nature are essentially one, and that Man, so far as he is spirit, also possesses the essentiality and substantiality that belongs to the idea of Deity. The condition of the mediation in question is the consciousness of this unity, and the intuition of this unity was given to man in Christ. The object to be attained is, therefore, that man should lay hold on this consciousness, and that it should be continually excited in him."

The Crusaders undertook to find the present and definite existence of deity. They took possession of the holy places, but found no corporal relics of Christ. The principle of religion is not found in the sensuous, in the corporal, in the grave, but in the living spirit itself. The Crusaders arrived at the fact that the essential nature of mankind is not to be found in the external, but in the internal, thinking consciousness. The most

The
Crusaders

profound principle of the world is that man is a self-conscious thinking being. Two principles of life grew out of the Crusades; self-reliance and spontaneous activity.

Spirit in its final evolution must be estranged in the external that it may return to the internal and thus attain its freedom. Art spiritualizes by transforming the internal into the external. It is by means of this outer manifestation that spirit holds communion with spirit, and soul is brought in contact with soul. Spirit further craves union with itself and seeks to become acquainted with its otherness, in discoveries, in the Fine Arts and in the Revival of Learning which have been called by Hegel "*the blush of dawn*" and "*the day of universality.*"

The Reformation.—While some were attaining freedom in art, some freedom in commerce, and some freedom in learning, Martin Luther set forth the doctrine that deity is embodied in subjectivity and spirituality, and that true unity with God is obtained by faith and spiritual enjoyment. Faith is not a belief in the sensuous, but a subjective assurance of Eternal Truth. The subjective thinking soul of man receives unto itself this Eternal Energy.

"The development and advance of spirit from the time of the Reformation onwards consists in this, that spirit, having now gained its consciousness of its freedom, through that process of mediation which takes place between man and God—that is, in the full recognition of the objective process as the existence of the divine essence—now takes it up and follows it out in building up the edifice of secular relations."

The central doctrine of this book is:

"By nature man is not what he ought to be; only through a transforming process does he arrive at truth."

The Eclaircissement.—The central thought in this great illuminating period of the world's history is:

"Man is not free, when he is not thinking; for except when thus engaged he sustains a relation to the world around him as to another, an alien form of being. This comprehension —the penetration of the ego into and beyond other forms of being with the most profound self-certainty directly involved the harmonization of being: for it must be observed that the unity of thought with its object is already implicitly present, for reason is the substantial basis of consciousness as well as of the external and natural."

Freedom
In Thinking

It is the function of thought to make the world contain what spirit is and it is the function of spirit to conceive the world to be the embodiment of reason. Mind must take cognizance of what objective reality is and objective reality must be analyzed into the eternal laws upon which phenomena is based. At this time G. W. F. Hegel says:

"It seemed to men as if God had but just created the moon and stars, plants and animals, as if the laws of the universe were now established for the first time; for only then did they feel a real interest in the universe, when they recognized their own reason in the reason which pervades it. The human eye became clear, perception quick, thought active and interpretative. . . . The laws of nature were recognized as the only bond connecting phenomena with phenomena. . . . Nature is a system of known and recognized laws; Man is at home in it, and that only passes for truth in which he finds himself at home; he is free through the acquaintance he has gained with nature."

Freedom
In Law

Nor was thought less vigorously directed to the spiritual side of things: right and morality came to be looked upon as having their foundation in the actual, present will of man."

In recognition of the validity of the laws of nature and the universal law of reason this movement of thought and history is known as *Eclaircissement*.

Spiritual Freedom Realized.—Spiritual freedom is realized by the student working out his own destiny, by willing nothing foreign to his inner nature, and by permitting reason to dominate and rule his life. When the student has thus progressed in the consciousness of freedom he realizes that:

"Never since the sun had stood in the firmament and the planets revolved around him had it been perceived that man's existence centres in his head, i.e., in thought, inspired by which he builds up the world of reality. Anaxagoras had been the first to say that *nous* governs the world; but not until now had man advanced to the recognition of the principle that thought ought to govern spiritual reality."

It is a glorious mental achievement to live in the light of reason, to reconcile the contradictory forces in life and to attain that fundamental spiritual principle by which man becomes man. Hegel tells us that the history of the world is nothing but the development of the idea of freedom. If the objective is in itself rational, human insight and conviction must correspond with the reason which it embodies, and then we have the other essential element — subjective freedom — also realized.

The Fundamental Process in Education finds a spiritual energy in the school process, in the teaching

process and in the universal process. This hidden power is the energy creating the school, the resident force immanent in instruction and the abiding reality in the humanistic process. This spiritual principle underlies every growth process in teaching, determines every activity in thought and lies at the foundation of every phase of human life. This same activity controls the deeper logical processes of the world, is the ultimate reality of nature and constitutes the innermost essence of mind. The school process and the teaching process unified and organized by the universal process represent different phases in the progress of the consciousness of freedom. The fundamental process of the school, the fundamental process in teaching and the fundamental process of the world are different stages in the growth of the spiritual energy which has for its final purpose, human freedom, human destiny, spiritual freedom, spiritual destiny.

"The Truth shall make you Free."

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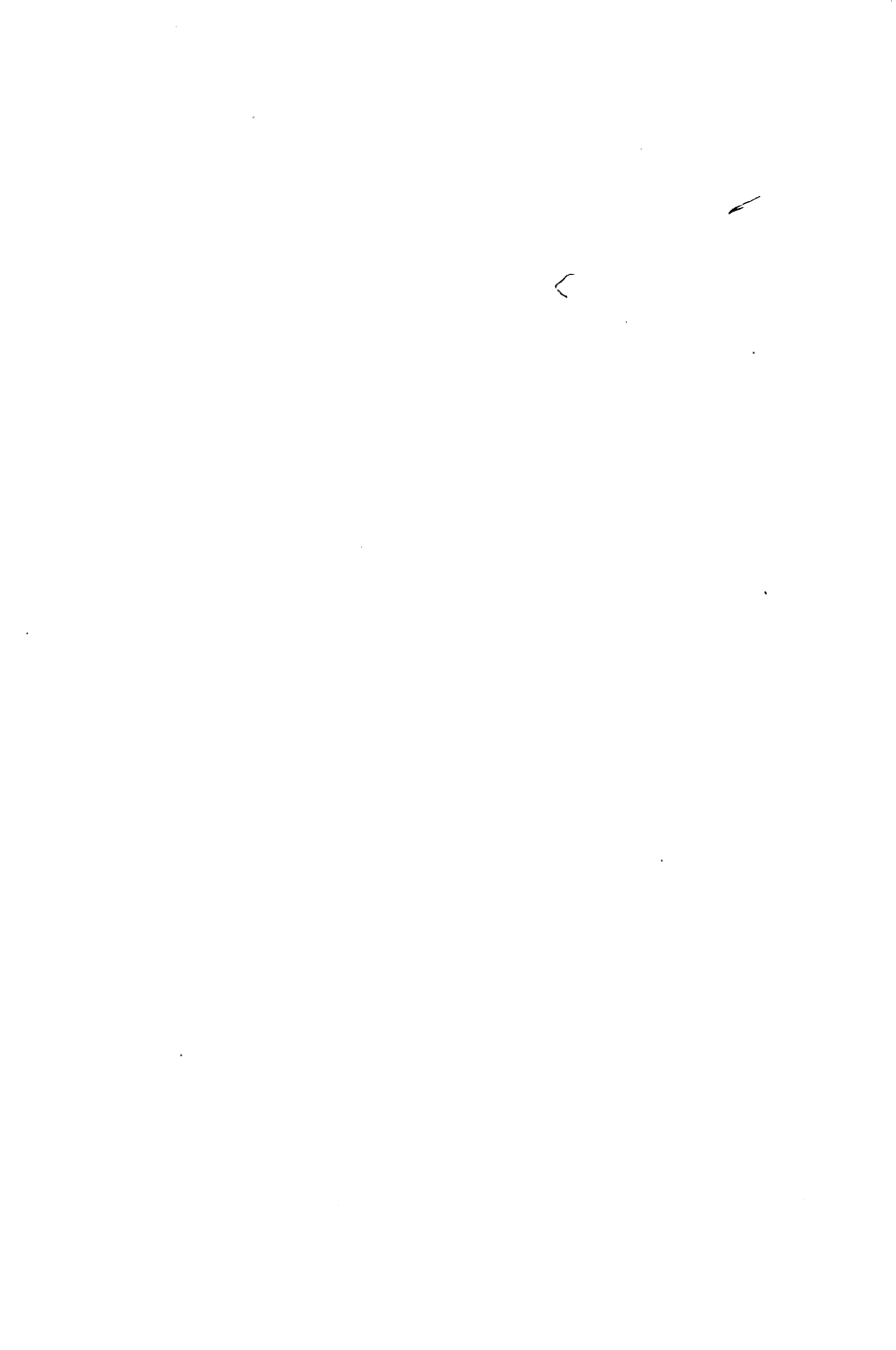
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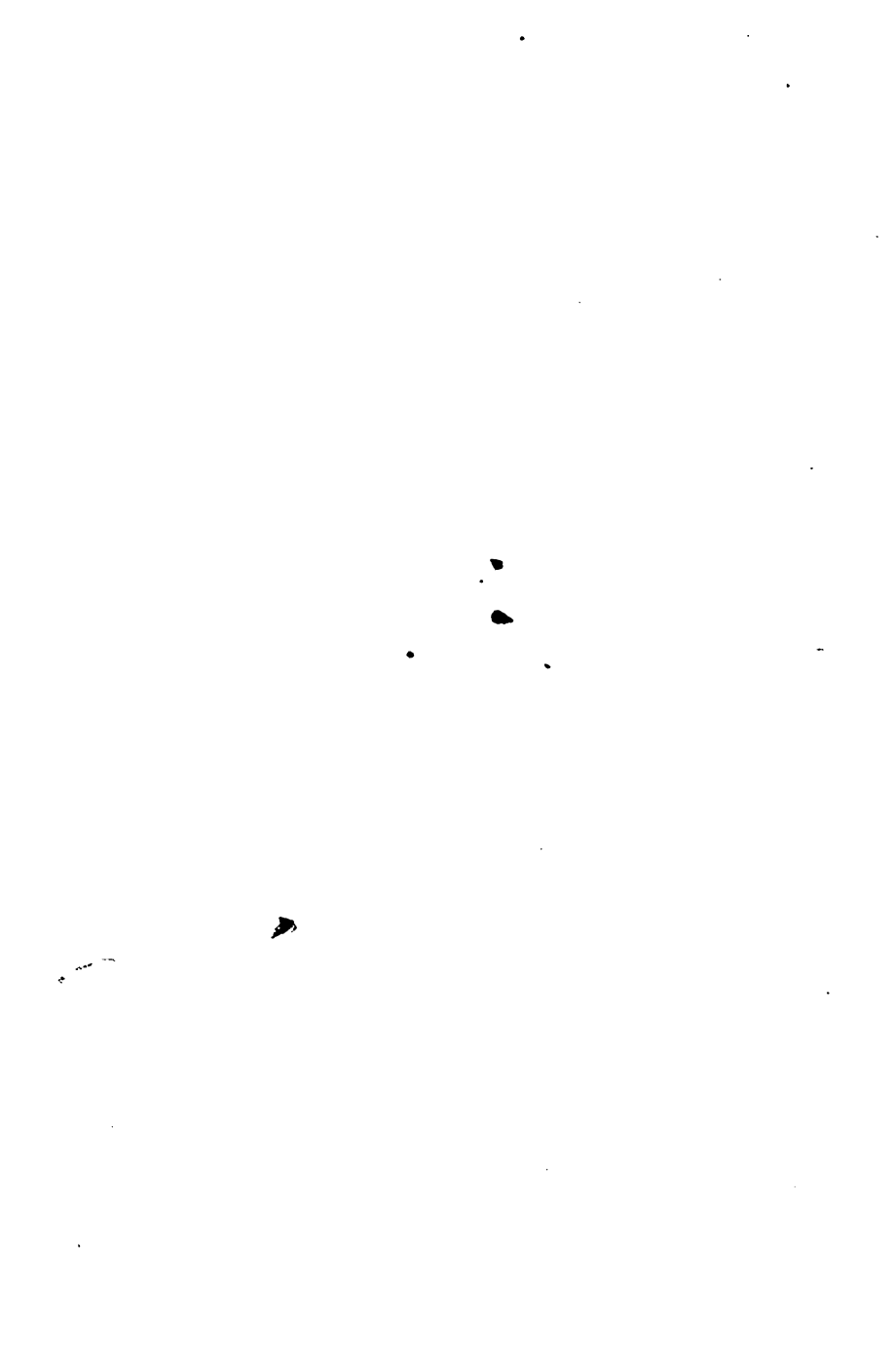
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